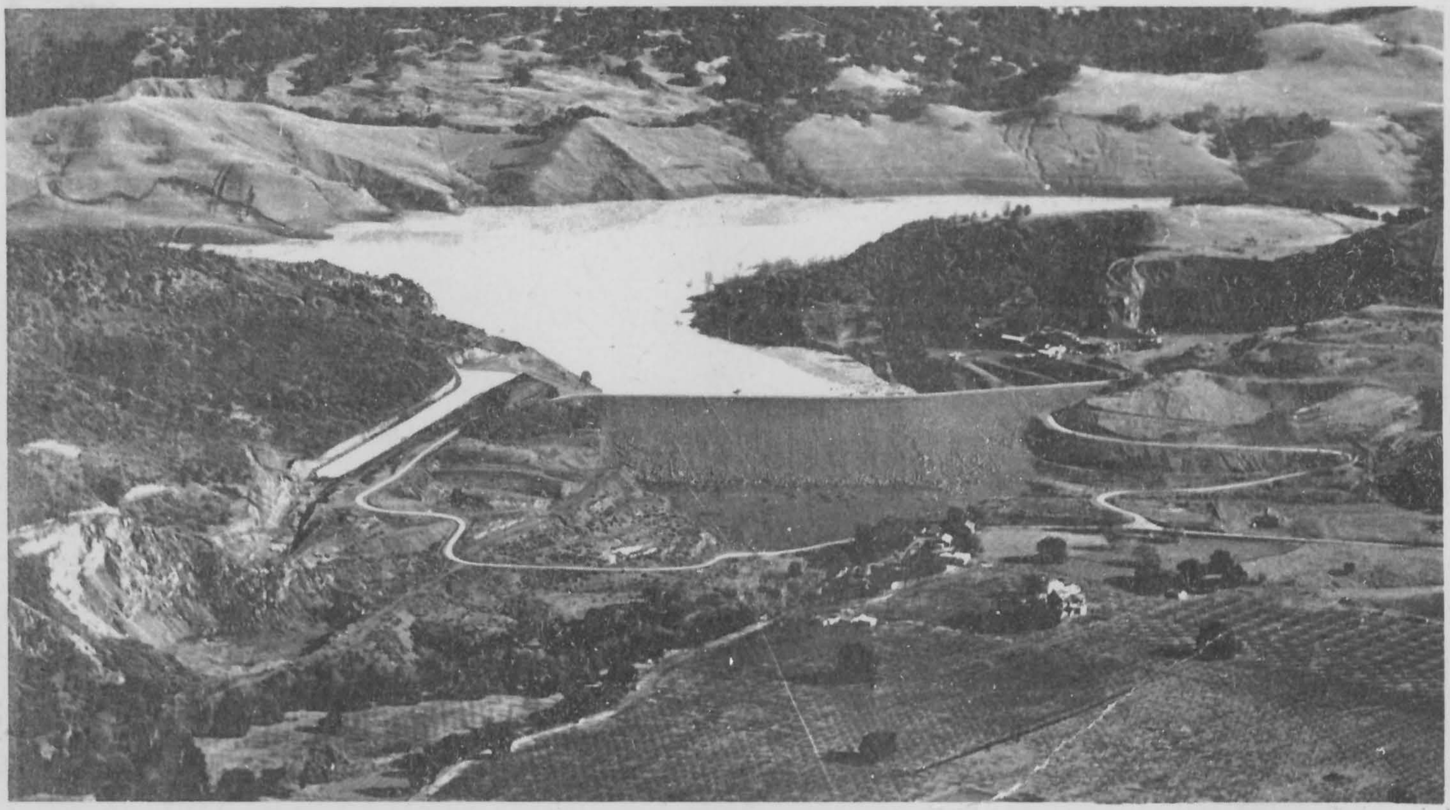
FLOOD PLAIN INFORMATION

COYOTE CREEK
SAN FRANCISCO BAY TO ANDERSON RESERVOIR
SANTA CLARA COUNTY
CALIFORNIA



PREPARED FOR
SANTA CLARA COUNTY
BY
CORPS OF ENGINEERS, U.S. ARMY
SAN FRANCISCO DISTRICT

FEBRUARY 1970

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PROPERTY OF SANTA CLARA VALLEY
WATER DISTRICT
5750 Almaden Expressway
San Jose, California 95118

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Cover photograph - Anderson Reservoir
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INTRODUCTION

This report relates to the flood situation along Coyote Creek, in the vicinity of San Jose, California, and adjoining communities. It was prepared at the request of Santa Clara County to aid in solving local flood problems and in planning the best use of land subject to overflow. Information in the report is based on available records of rainfall, runoff, and historical flood heights, and on other technical data bearing on the occurrence and size of floods in the San Jose area.

Available data on the largest known floods on Coyote Creek are compiled in the report, and the nature and extent of probable future floods are discussed. The report is intended to provide information to developers, organizations, and local agencies for their use in developing and using flood plain areas in such a way that flood hazards and future flood damage may be minimized. It contains maps, profiles, and cross sections that indicate the approximate depth and extent of flooding that can reasonably be expected to occur in the future.

Local agencies operate and maintain reservoirs that contribute to flood damage reduction on the stream considered in this report. The effect of these projects was considered in determining the magnitude of future floods.

Plans or recommendations for the solution of flood problems in the study area are not included in this report. Rather, it provides Santa Clara County and the cities along Coyote Creek a basis for further study and planning for optimum development of flood plain areas commensurate with the flood hazard. Such study and planning may involve local programs to guide development by controlling the types of use made of flood plains through zoning and subdivision regulations, by construction of flood control projects, or by a combination of these and other approaches.

In problems associated with developments in the flood plains of Coyote Creek, Santa Clara County and other local interests should give consideration to the possible recurrence of floods of the same magnitude as past floods, and to the occurrence of floods of greater magnitude.

Santa Clara County will make copies of this report available to all interested agencies and provide information on its use. The San Francisco District of the Corps of Engineers will, upon request, provide technical assistance to Federal, State, and local agencies in the interpretation and use of the information contained herein, and will provide other flood data related thereto. However, the report is not intended to extend any Federal authority over zoning or other regulation of flood plain use.

SUMMARY OF FLOOD SITUATION

The flood plains described in this report are those adjacent to Coyote Creek only. Lands subject to overflow by tributary streams are not described and will be the subject of future studies. The basin boundary of Coyote Creek watershed becomes less defined as the stream approaches San Francisco Bay. During periods of floodflow, basin boundary limits are often exceeded by out of channel flow. When the floodflows exceed the basin boundary limits these flows seek a new watercourse, either a tributary of Coyote Creek or in some cases, a parallel stream.

* * *

LAND SUBSIDENCE resulting from subsurface fluid extractions has greatly increased the flood hazard in the lower reaches of Coyote Creek.

* * *

THE GREATEST FLOOD known to have occurred on Coyote Creek since the first stream gage was established in 1903 was in March 1911. Since construction of Coyote Reservoir (1936) and Anderson Reservoir (1950) the maximum occurrence was in 1958.

* * *

THE INTERMEDIATE REGIONAL FLOOD has a frequency of occurrence of once in 100 years, based on an analysis of the flood records of all of the major streams in the General Region. The peak discharge of this flood would be more than twice that of the 1958 flood.

* * *

STANDARD PROJECT FLOOD OR FLOOD-PLAIN FLOOD. Determinations indicate that floods could occur on Coyote Creek more than four times the magnitude of the 1958 flood of record.

* * *

COMMINGLING of floodwaters of many streams in the lower reaches of their channels near San Francisco Bay results in the provision of arbitrary flood limits for this study.

* * *

MAIN FLOOD SEASON for Coyote Creek extends from October to April.

* * *

VELOCITY OF FLOODFLOWS during major flood events, as averaged in main channel cross sections, is sometimes in excess of 15 feet per second, especially in the upper channel reaches. Velocity, both overbank and channel, at San Francisco Bay, would range from zero to three feet per second. Overbank velocity, other than in the areas adjacent to the bay, would generally be about two feet per second.

* * *

DURATION OF FLOODFLOWS. During a flood of the intermediate regional magnitude, flow depth would be at or above flood stage for about one day. During a flood of the standard project magnitude, the flow depth would be at or above flood stage for about three days.

* * *

HAZARDOUS FLOOD CONDITIONS are relative to the size of the persons or objects experiencing the hazard. When loss of life is a factor velocity of flow greater than two and a half feet per second, combined with depths of flow of one foot or more, must be considered hazardous, and if small children are involved, these figures may be excessive. Structural hazard generally begins when floodwaters first enter the structure or when the situation changes from nuisance to serious.

* * *

FLOOD DAMAGE PREVENTION MEASURES are limited to the maintenance performed by local interests. Federal of State agencies have not participated in construction of formal damage prevention measures. The operation of Coyote and Anderson Reservoirs for water supply provides incidental flood control storage.

* * *

FEDERAL FLOOD CONTROL IMPROVEMENT STUDIES have not proved justification of channel improvements along Coyote Creek at the present time. These studies have not been finalized as of February 1970.

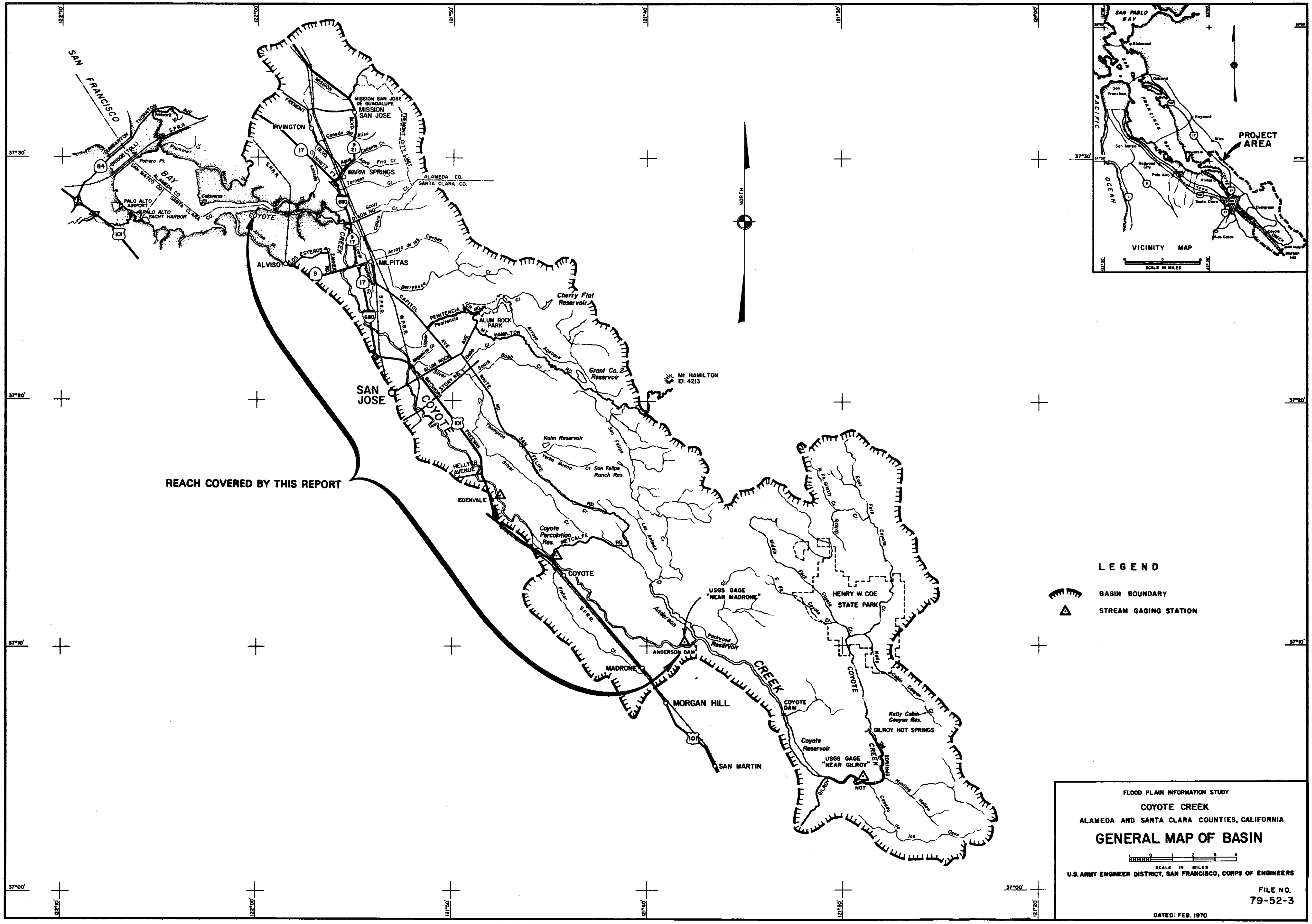
GENERAL CONDITIONS AND PAST FLOODS

Coyote Creek, approximately 75 miles long, intercepts numerous small tributaries on the east side of the Santa Clara Valley. Official flood records date from 1903 when a stream gage was established near the present site of Anderson Reservoir. Records are available from a number of other stations that have been operated intermittently by the U.S. Geological Survey and Santa Clara County.

History

During the last half of the 18th century, California was an active region of exploration, both by land and sea. The Spanish expeditions that originated in Mexico were the most prevalent. The Portola Expedition of 1769 passed through the Santa Clara Valley and in 1777 the Eighth California Mission was established on the banks of the Guadalupe River. The mission, destroyed by flood in 1784, was relocated nearby in the present-day city of Santa Clara. The Spanish king, Carlos the Third, established or named the present city of San Jose - Pueblo de San Jose de Guadalupe - on 29 November 1777.

The Mission San Jose was established in 1795 near the mouth of Coyote Creek. The mission, in addition to being available to the north-south traveler, had access to San Francisco Bay and was on the main route to the San Joaquin Valley to the east. In addition to the padres and other Spanish travelers, visits were made by many alien travelers, such as the Russian ship Juno from Sitka, Alaska, in 1806, and in 1827 the young American trapper and explorer Jedediah Strong Smith. The California county of Stanislaus to the east in the San Joaquin Valley was named for an Indian convert who lived at the mission and was later to flee the Spanish into the San Joaquin Valley. Stanislaus and his followers held off two Spanish expeditions before bowing to Vallejo and his troops.



FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

ALAMEDA AND SANTA CLARA COUNTIES, CALIFORNIA

GENERAL MAP OF BASIN

SCALE IN MILES

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

FILE NO.
79-52-3

DATED: FEB. 1970

PLATE 1

In July 1846 the American flag was raised over San Jose and it later became the first state capital.

The stream and its valley

The 75-mile long Coyote Creek drains about 420 square miles, almost half of which is tributary to the water supply reservoirs, Coyote and Anderson. The Coyote Creek Basin generally lies in Santa Clara County, but a small portion, near its mouth, is located in southwestern Alameda County. A general map of the basin is shown on Plate 1 of this report. Basin elevations range from slightly below sea level to over 3,000 feet above sea level. The winters are relatively mild, with 90 percent of the rainfall occuring in the late fall or winter months; January is normally the wettest month. The study area is bounded by the Diablo Range to the east, an alluvial divide on the south, the Guadalupe River Basin to the west, and San Francisco Bay to the north.

Developments in the flood plain

Santa Clara County has experienced phenomenal growth since World War II. Farm and orchard lands have rapidly given way to light industry and housing tracts. Since 1950 the population has more than doubled. The area has become prominent in the research field, especially in space exploration. Over ten percent of the nation's largest industrial corporations have some form of installation in the county. The area includes one of California's largest food-processing centers. Economic growth projections for the area indicate the growth will continue at a high rate.

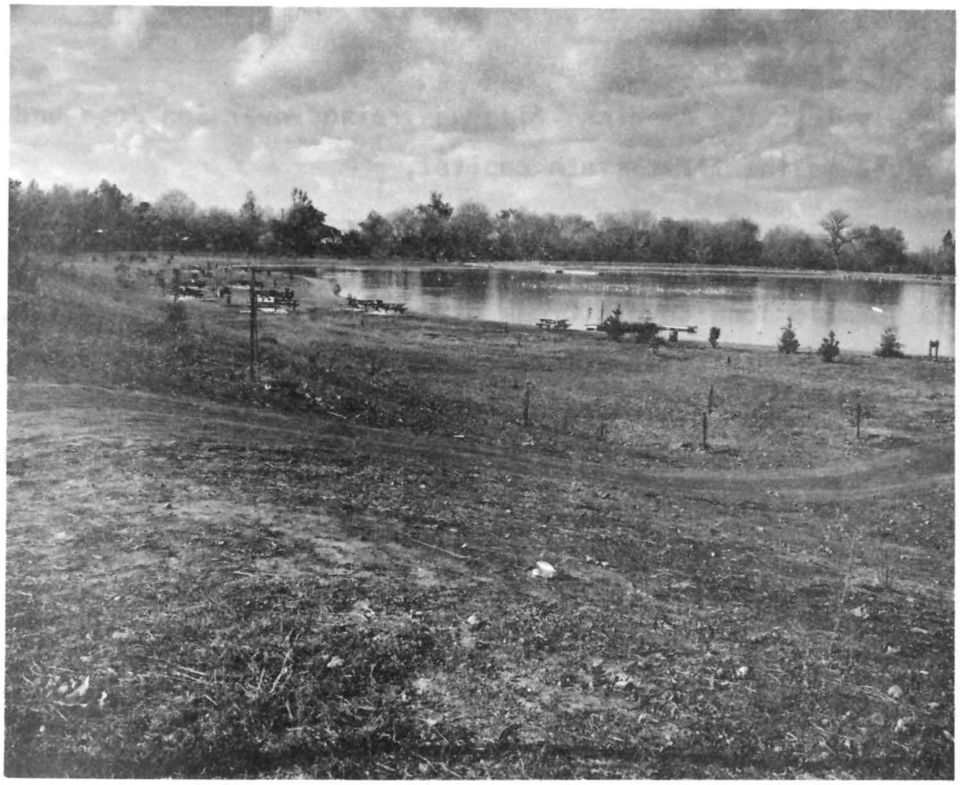


Figure 1 - Park located along the right bank of Coyote Creek between U.S. Highway 101 and Hellyer Avenue

Flood damage prevention measures

While the water impoundment reservoirs, Coyote and Anderson, must be included in flood-control structures, it is incidental to their paramount purpose. Numerous local channel improvements and rectification projects have been undertaken by local interests. Although the Corps of Engineers have made studies of various flood control systems, none have proven feasible at this time. The park shown in Figure 1 is a prime method by which the community need for parks, open space and flood damage prevention can be met with a minimum outlay of funds.

Flood warning and forecasting services

Specific flood warning or forecasting services from the Federal State River Forecast Center at Sacramento, California, are not available for the study area. General weather forecasts of intense rainfall with accompanying flood warnings are issued by the U.S. Weather Bureau and are available by telephone, newspapers, radio and television.

Bridges across the stream

During periods of low water there are 43 points where Coyote Creek can be crossed. Many of the crossings are summer or low water type. The major (25) all-weather crossings are listed on Table 1.

TABLE 1

BRIDGES ACROSS COYOTE CREEK

			Elevations above mean sea level			
Bridge		River mile	Deck	Under-clearance	Streambed	High water 1969
Southern Pacific Rwy		4.1	7.5		- 6.5	4.0
Dixon Road		8.2	10.3	7.3	+ 2.5	6.0
Alviso - Milpitas Rd	(Old	11.2	25.5	22.7	10.0	21.0
	(New		29.3	25.3	10.5	21.5
Trimble Road	(L	13.9	46.5	42.5	21.0	35.0
	(U		43.0	39.5	21.0	35.0
O'Toole Avenue		15.1	55.0		31.0	41.2
Nimitz Freeway)	(L	15.2	67.2		31.5	42.0
I 680)	(U		67.2		32.0	42.0
Southern Pacific Rwy		15.6	65.0		37.0	47.0
Oakland Road		15.8	63.0		39.0	51.0
Berryessa Road		17.0	75.3	72.3	55.0	66.0
Mabury Road		17.5	82.3		58.5	71.0
Bayshore Freeway - U.S.101		17.7	89.0		59.0	73.0
Julian Street		18.4	93.6		60.5	77.0
Santa Clara Street		18.9	96.7		61.0	79.0
San Antonio Street		19.2	94.7		61.5	80.0
William Street		19.5	96.5		62.0	81.0
Western Pacific Railroad		20.4	106.5	104.0	70.0	84.0
Story Road	(L	20.6	104.0	98.5	74.0	86.0
	(U		101.7	95.7	74.0	86.5
Tully Road		23.0	124.5		102.0	112.0
Capitol Expressway		24.6	150.0		126.0	131.0
Hellyer Avenue		26.1	167.7		140.3	152.5
Bayshore Freeway)	(L	26.8	179.5	172.3	154.2	163.0
U.S. 101)	(U	26.8	179.5	172.3	154.2	163.0
Ford Avenue		29.0	205.0		182.0	192.5
Metcalf Road		32.5	243.0	241.3	230.5	234.0
Burnett Road		40.3	365.0		355.0	361.0
Boys Ranch Road		41.3	387.0	385.0	376.0	384.0

U - upstream bridge
L - downstream bridge

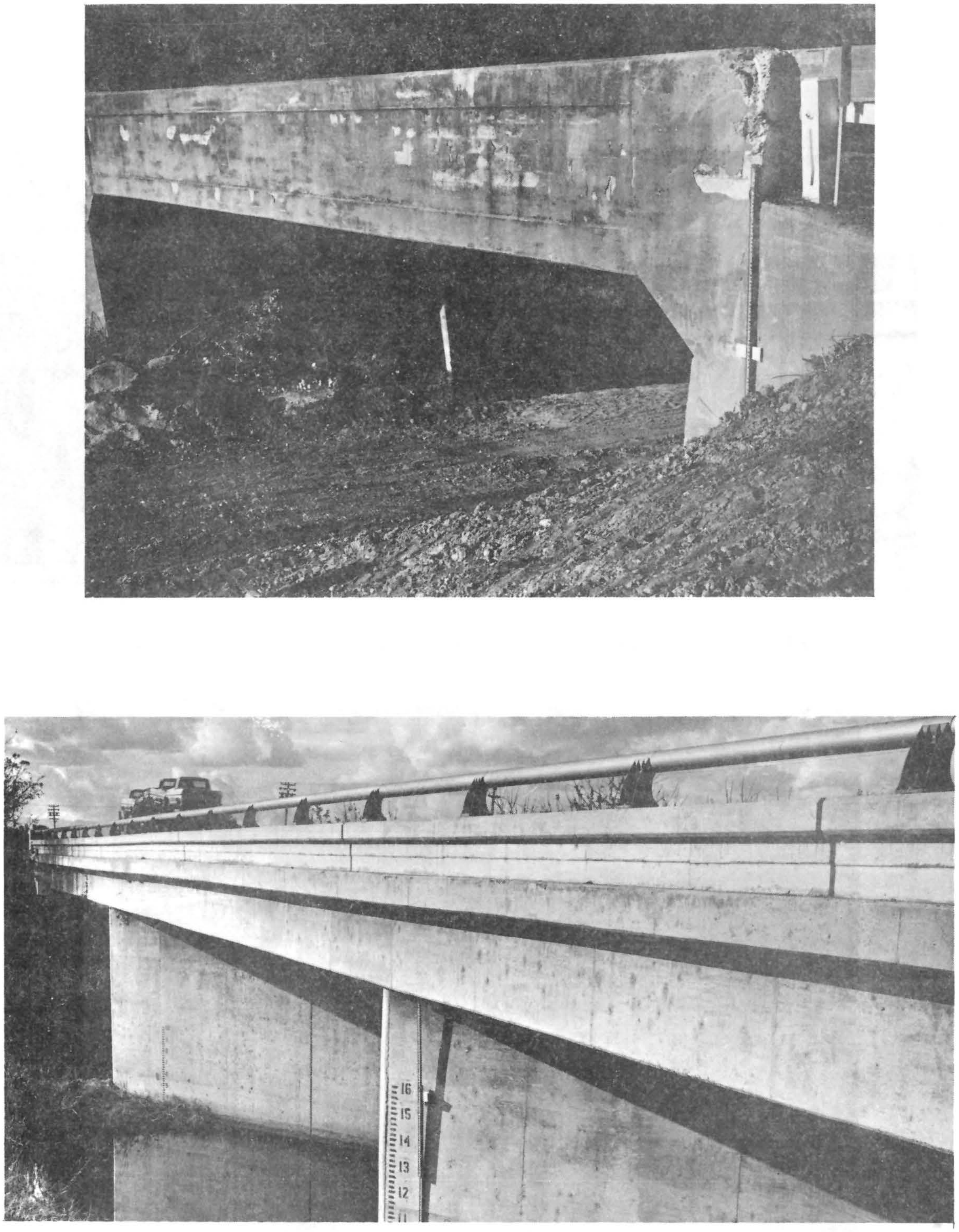


Figure 2 - Old (upper) and new (lower) Alviso-Milpitas Road bridges

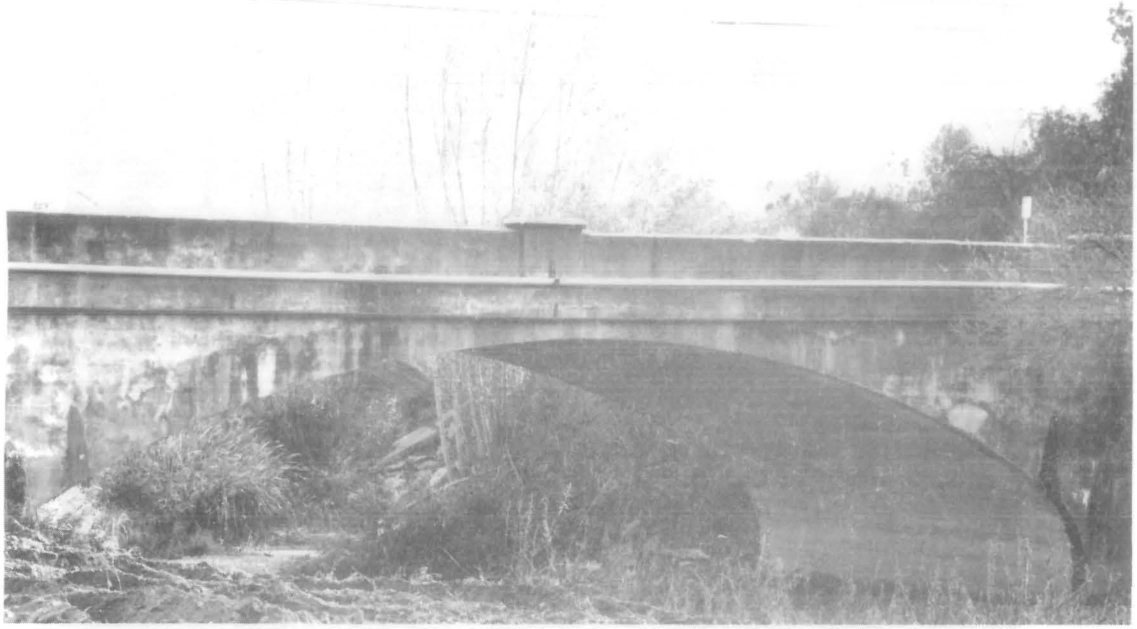


Figure 3 - Looking upstream at Berryessa Road bridge

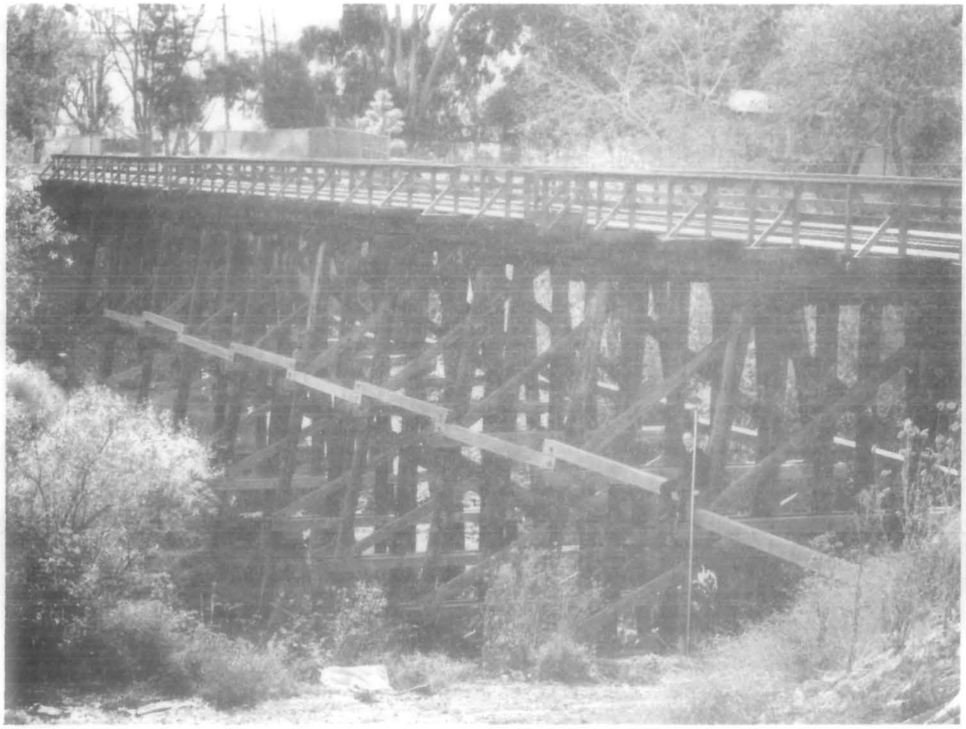


Figure 4 - Looking downstream at Western Pacific Railroad bridge

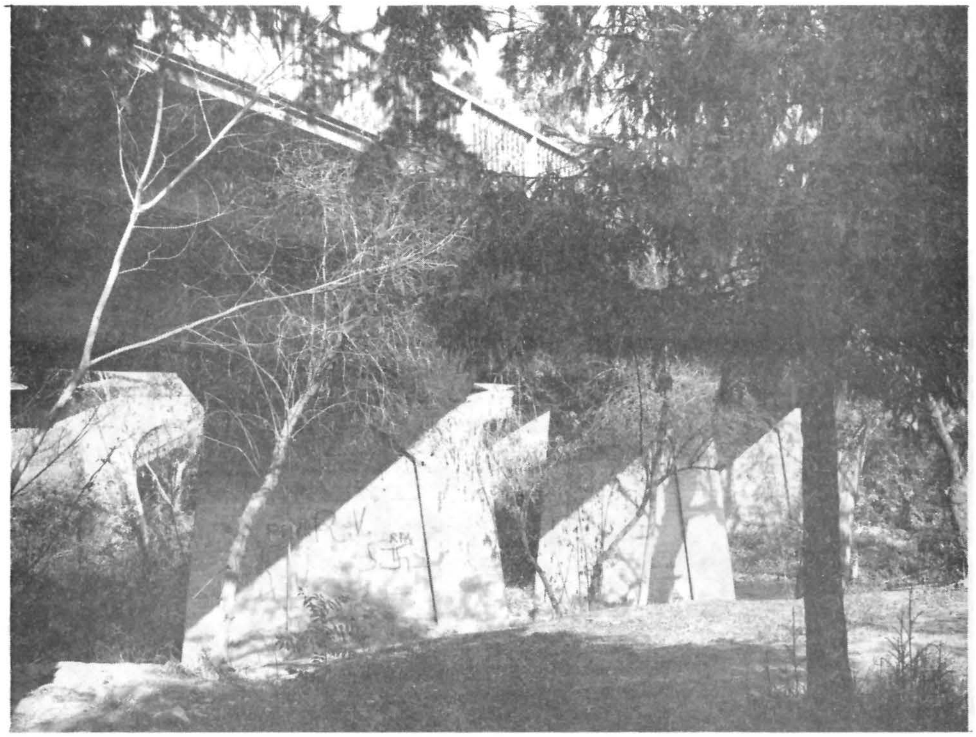


Figure 5 - Looking downstream at Story Road bridge

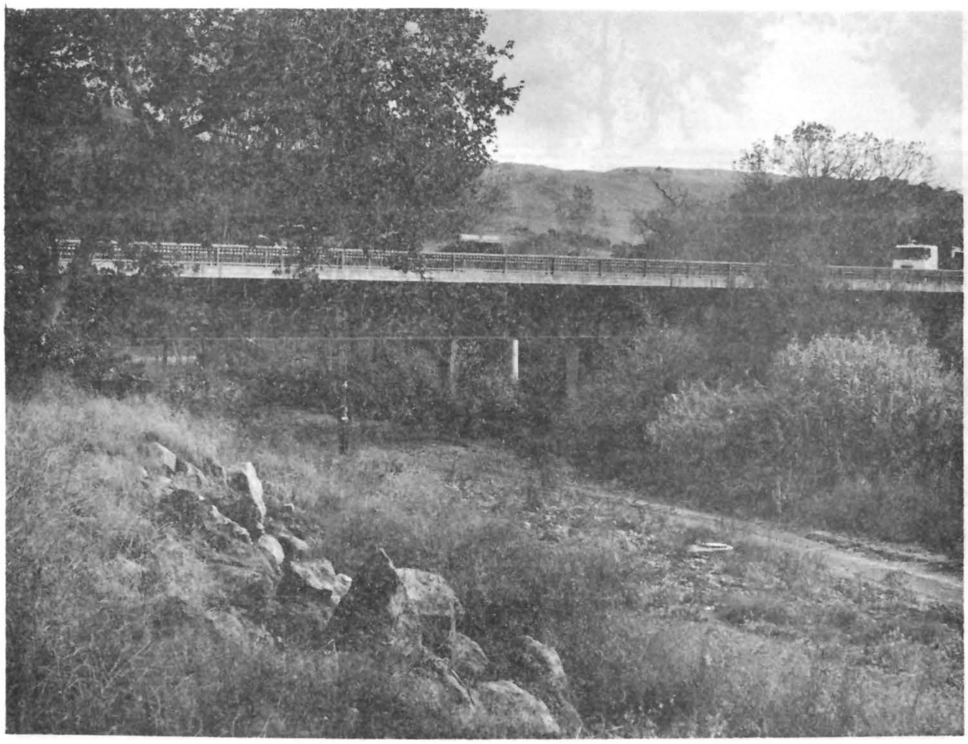


Figure 6 - Looking upstream at U.S. Highway 101 bridge
(River Mile 26.8)

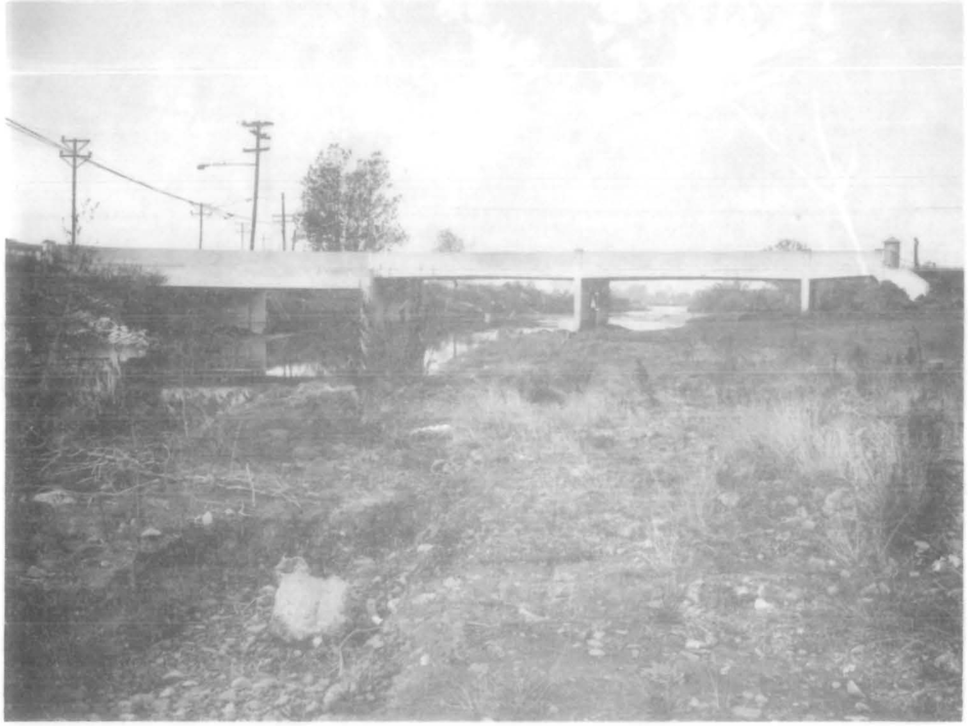


Figure 7 - Looking downstream at Metcalf Road bridge

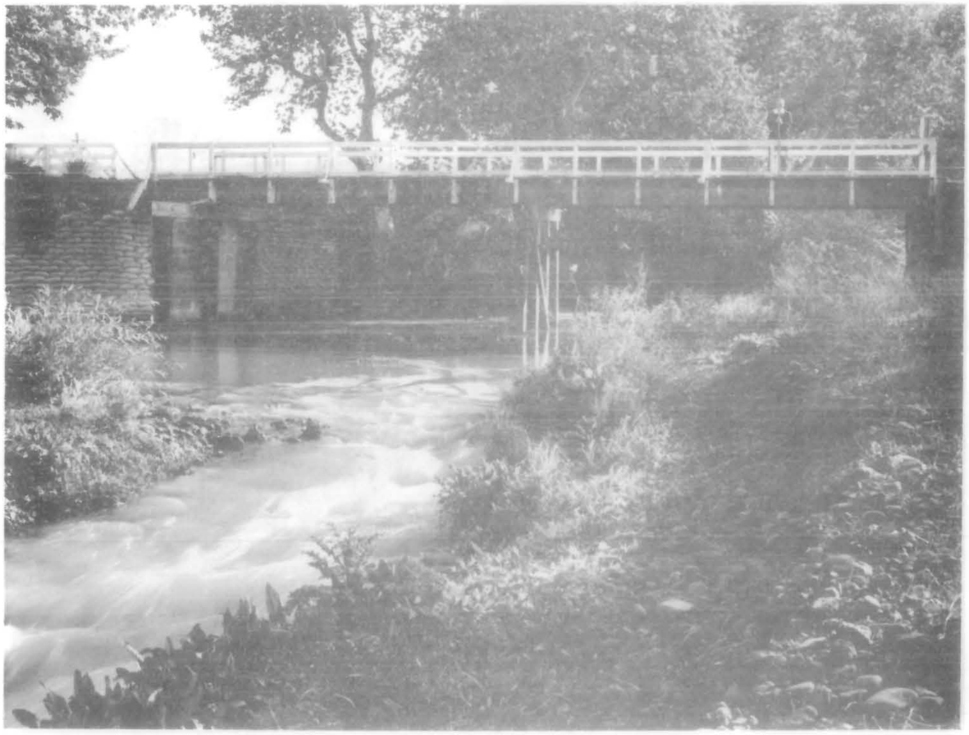


Figure 8 - Looking upstream at Boys Ranch Road bridge

Flood Situation

Flood Records

Records of stages and discharges on Coyote Creek have been maintained since 1903. However, regulations by the Coyote and Anderson Reservoirs, beginning in February 1936 and December 1950, respectively, make adjustment of prior records necessary.

Several gaging stations have been maintained by the U.S. Geological Survey and Santa Clara County over the past years. Some of the information is fragmentary and would, because of the reservoirs, require adjustments. Gaging station locations are shown on Plate 1.

The U.S. Geological Survey presently maintains two stream gages on the Coyote Creek. The upstream gage (near Gilroy) is located about five miles upstream from Coyote Dam. The downstream gage (near Madrone) is located about 1.2 miles downstream from Anderson Reservoir. These two gages have 109 and 196 square miles of contributory watershed, respectively. Other stream gages that are shown on Plate 1 include the Santa Clara County gages at Metcalf Road and near Edenvale.

Coyote Dam and Reservoir have 120 square miles of contributory watershed. Records are available from 1936 to the present time. Records include reservoir contents and a daily lake surface elevation. The Coyote Reservoir is formed by a rock and earth-fill dam, completed in 1936. The capacity between the invert of the outlet tunnel at elevation 693.3 and the crest of the spillway at elevation 777.0 is about 23,500 acre feet. Storage releases are impounded in Anderson Reservoir.

Anderson Dam and Reservoir have 195 square miles of contributory watershed. Records are available from December 1950 to the present time. Records include reservoir contents and a daily lake surface elevation. The reservoir is formed by an earth and rock-fill dam, completed in 1950. The capacity between the invert of the outlet tunnel at elevation 439 and the crest of the spillway at elevation 625 is about 91,300 acre feet. Storage releases are made for irrigation and groundwater recharge by percolation.

Rainfall records have been maintained in Santa Clara County since 1874. Records are available from about 130 gages, many of which are currently in operation. Rainfall records at U.S. Weather Bureau stations are published in the various climatological data publications. A compilation of records maintained by Federal, State, local agencies and private individuals has been made for the Santa Clara County Flood Control and Water District.

Table 2 lists crest stages and discharges that have occurred at the stream gaging station, located downstream of Anderson Reservoir, since the construction of the reservoir in 1950.

TABLE 2

COYOTE CREEK NEAR ANDERSON RESERVOIR (MADRONE)
HIGHEST FIVE DISCHARGES SINCE COMPLETION OF ANDERSON AND COYOTE RESERVOIRS

Date of crest	Gage height feet	Discharge cfs	Order of magnitude
22 November 1950	4.0	230	5
17 September 1954	5.20	460	3
3 April 1958	9.65	5,750	1
17 July 1963	3.05	245	4
25 February 1969	8.11	3,600	2

Duration and rate of rise

Discharge hydrographs of the flood of record (since construction of reservoirs) and the Standard Project Flood are given on Plates 2 and 3 of this report. During the flood of April 1958, downstream of Anderson Reservoir, the stream rose to its flood crest in about 12 hours with an average rate of rise of about 0.6 foot per hour. The maximum rate of rise was about two feet per hour. Upon occurrence of a flood of the Standard Project Flood magnitude, a rise in stage of about 15 feet could be expected in slightly over 40 hours. The average rate of rise would be about one third of a foot per hour with the maximum rate of rise of about two feet per hour.

Velocities of flow

Channel features, such as slope, roughness, shape and area of cross section control the velocity of flow.

Channel obstructions, such as bridge piers and abutments, as well as natural outcropping, excessively large trees, and other abnormal channel restrictions, both natural and man-made, often cancel out channel characteristics that would produce rapid flow.

Velocity in Coyote Creek ranges from about one foot per second, at San Francisco Bay, to about 15 feet per second in the upper study reaches. These velocities are average for the section and point velocities could be 30 to 40 percent greater.

Overbank velocities in the lower reaches are less than one foot per second. Velocities of two or three feet per second in the overflow areas upstream of Story Road could be expected.

Flood Descriptions

Floods that have occurred since the U.S.G.S. gage "Coyote Creek near Madrone" was established in 1903 and prior to construction of Coyote and Anderson Reservoirs include occurrences in March 1903, January 1906, December 1906, January 1909, March 1911 (maximum recorded), February 1917, February 1922, January 1923, February 1926, February 1927, March 1930, and December 1931. Newspaper accounts of the largest flood that has occurred since the two reservoirs (Coyote and Anderson) began operation in tandem in 1950 are given in the following paragraphs.

San Jose News - 3 April 1958

"A navy helicopter hauled 21 children, five adults and five dogs to safety today as the raging water of Coyote Creek threatened to spill into their homes - - - They made four trips to a creek-side clearing where the victims were stranded. The cluster of homes is about three miles from the town of Coyote on U.S. Highway 101. Meanwhile the flood danger throughout Santa Clara County eased today except the hard luck town of Alviso."

San Jose News - 5 April 1958

"Water still was at depths up to eight or ten feet in places in Alviso this morning with all but a few of its 1,050 residences now evacuated. - - - Alviso was hit again Friday when the Coyote Creek overflowed near Agnews State Hospital's east area. Water from Coyote joined that from the already flooding Guadalupe River to keep a steady flow of water into the soaked city."

" - - - The levee along the Alviso side of the Coyote Creek broke in ten places between Trimble Road and the extension of Brokow Road - - - Two and a half feet of water covered the road (Milpitas - Alviso) over the weekend. - - - "

FUTURE FLOODS

This section of the report discusses the Intermediate and Standard Project Floods and some of the hazards of great floods. While the Intermediate Regional Flood could conceivably occur with some regularity, floods the size of the standard project would represent reasonable upper limits of expected flooding.

Flood Determinations

Intermediate Regional Floods

Intermediate Regional Floods are defined as having an average frequency of occurrence of once in 100 years. Although it has a reoccurrence interval of 100 years, the flood could occur more than once in a flood season or could occur several times in a decade.

Limitations in flood records and rainfall data require the analysis of records over the entire region under study. From these regional analyses and from the statistical analysis of streamflow records available for the watershed, probability estimates are made. The frequency analysis of annual peak discharge for the periods of record was made by standard analytical methods adopted by the Corps of Engineers for estimating flood frequencies.

Peak discharges of the Intermediate Regional are shown in Table 3.

Standard Project Storm and Flood

The term "standard project storm" denotes the storm used to derive the Standard Project Flood and represents the most severe combination of meteorological and hydrological conditions reasonably characteristic of the region, excluding extremely rare combinations or events.

The Standard Project Flood is developed from this storm by assuming the storm is centered over the study basin with antecedent conditions reasonably favorable to runoff. The Standard Project Flood is used as a basis of evaluating the degree of protection provided by a selected design discharge and usually establishes the upper limit of discharge values considered for channel or flood-control storage design. Notably severe storms which have proven critical in establishing the standard project storm of other streams in the San Francisco Bay area are 9 to 12 December 1937, 21 to 24 December 1955, and 11 to 13 October 1962. The 21 to 24 December 1955 storm has been adopted in this study as the standard project storm as it resulted in the largest peak discharge on Coyote Creek. The October 1962 and December 1955 storm transpositions resulted in about equal peak discharges on the smaller tributary basins. When storm rainfall depth is expressed as a percentage of normal annual rainfall, the major center of the December 1955 storm was found to be in the Hollister area, about 40 miles southeast of San Jose. The storm was transposed by means of a depth area curve developed from the storm isopercentual lines. Loss rates varying from 0.17 inch per hour at the beginning of the storm to a minimum of 0.08 inch per hour were applied to the rainfall and a discharge hydrograph developed by unit hydrograph procedure. Inflow hydrographs were developed for each reservoir and spillway outflow hydrographs computed by reservoir routing procedures, assuming reservoirs were full at the beginning of storm runoff. Sub-basin hydrographs were then combined by channel routing or time adjustment to arrive at the estimated Standard Project Flood discharge in the lower reaches of Coyote Creek. Total storm rainfall was distributed by an average of three recorders near the storm center area. Discharge hydrographs of the Standard Project Flood are shown on Plate 3. Standard project storm and flood peak discharge values at representative index points are given in Table 3.

TABLE 3

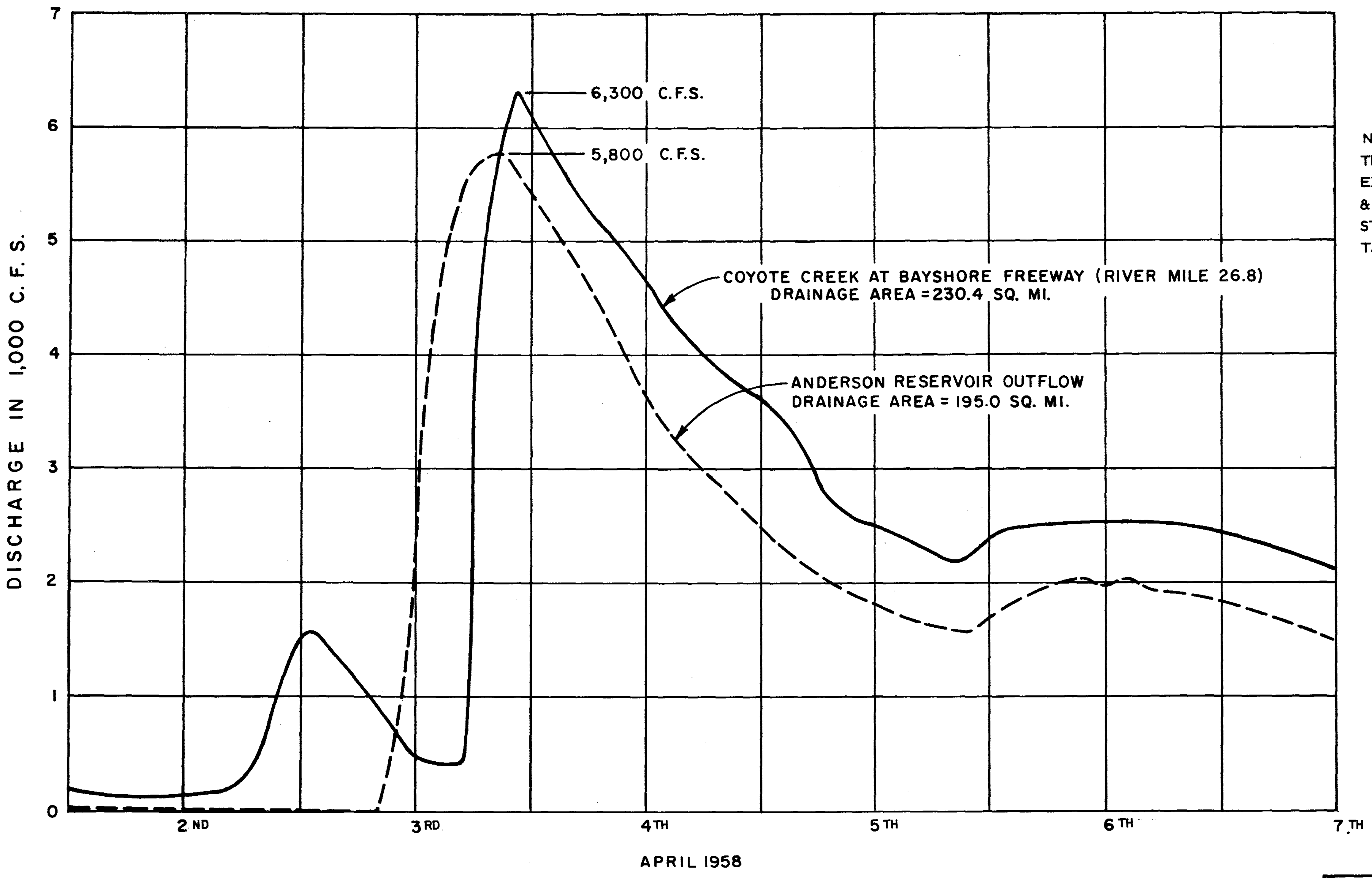
COYOTE CREEK - HYDROLOGIC DATA

			Precipitation in inches		Discharge in thousand cubic feet per second						
Location	River mile	Drainage area	Normal annual	72-hour storm	SPF	In channel flow	IRF	In channel flow	Feb '69	In channel flow	April '58
				(SPS)	A	B	A	B	A	B	
Coyote Dam	-	120	22	11.4	-	-	-	-	-	-	-
Anderson Dam	41.2	195	22	11.2	23.0*	23.0	14.0	14.0	3.6	3.6	5.8
River Mile	34.0	-	-	-	25.5	16.0	15.5	14.5	3.6	3.6	-
Metcalf Road	32.5	224	21	11.0	25.5	25.5	15.5	15.5	3.6	3.6	6.2
Bayshore Freeway	26.8	230	21	11.0	26.1	9.5	15.9	9.3	4.0	4.0	6.3
Story Road	20.6	238	21	10.9	26.5	9.9	16.1	9.5	4.0	4.0	6.4
Dixon Road	8.2	366	20	10.2	40.0	2.0	25.0	2.0	4.0	2.0	9.6

Column A is the total Standard Project Flood including floodflows that have escaped into another water-course.

Column B is the residual discharge that remains in the Coyote Creek channel and contiguous overbank area.

* Includes spillway and outlet discharge.

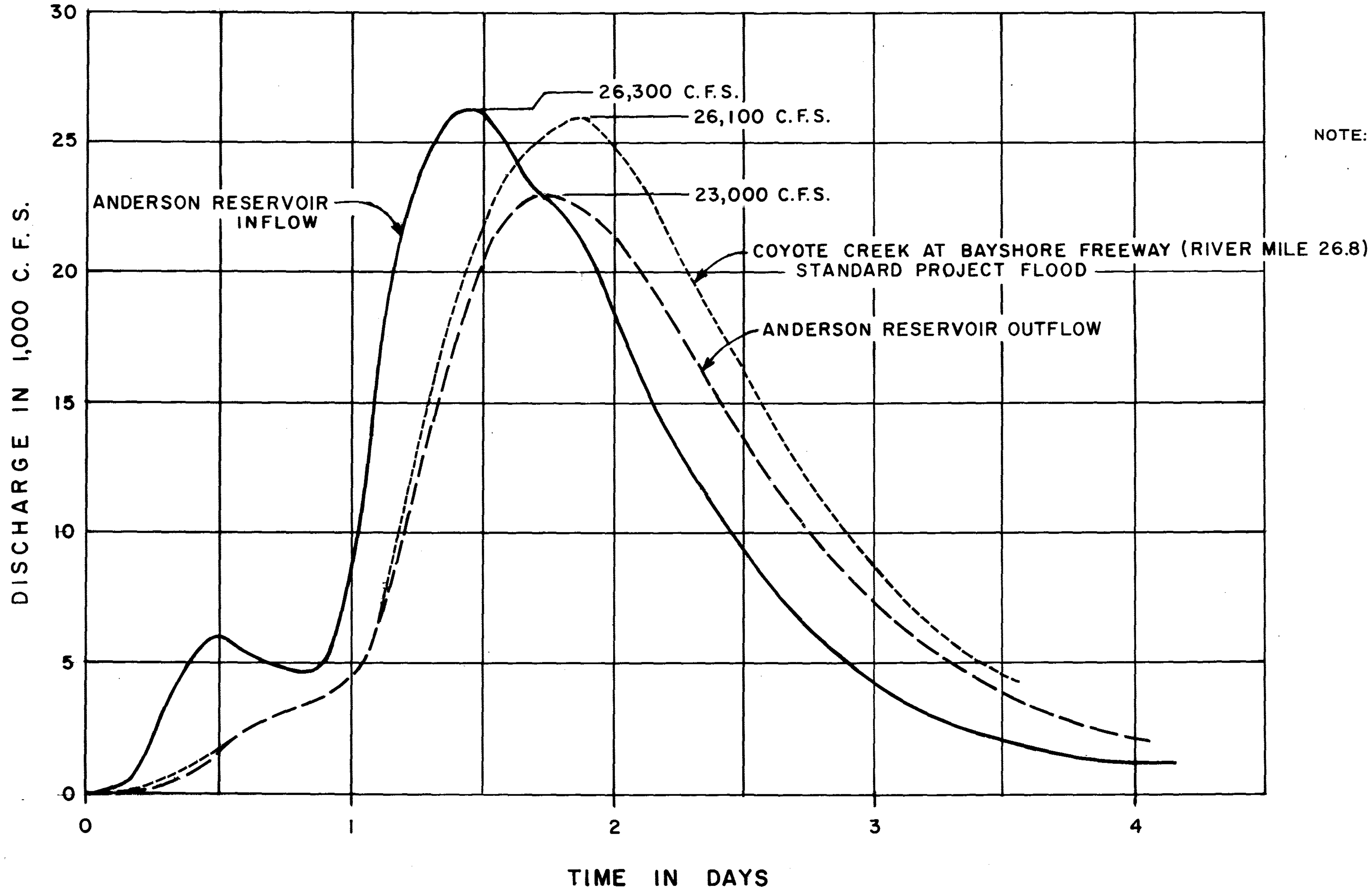


NOTE:
THIS IS THE MAXIMUM FLOOD EXPERIENCED SINCE COYOTE & ANDERSON RESERVOIRS STARTED OPERATING IN TANDEM IN 1950

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA
DISCHARGE HYDROGRAPHS
APRIL 1958
FLOOD OF RECORD

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
79-53-3
DATED FEB. 1970

PLATE 2



NOTE: THE DEC. 1955 HOLLISTER STORM CENTER WAS TRANSPOSED OVER THE COYOTE CREEK BASIN TO GENERATE STANDARD PROJECT STORM RAINFALL

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

DISCHARGE HYDROGRAPHS
STANDARD PROJECT FLOOD

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
79-53-3
DATED FEB. 1970

Frequency of the Standard Project Flood

The Corps of Engineers does not assign a frequency to the Standard Project Flood. It is larger than the Intermediate Regional Flood and is generally larger than any flood that has occurred on the subject stream.

Possible larger floods

In the recorded history of the western United States, it is doubtful if any of the streams have experienced the largest flood that is likely to occur. Floods potentially greater than the Standard Project Flood are entirely possible but are generally only considered in the design of dams. Consideration of these extremely rare floods should not be overlooked in the solution of any problem.

Hazards of Great Floods

The hazards from great floods cannot be entirely expressed as tangibles. Although relationships, such as depth and velocity of flow, rate of rise and duration of flooding are a measure of the hazard, other less tangible factors must be considered. The adult seeing floodwater flowing in the street to the top of the curb is confronted with a delaying nuisance. The child viewing the same scene may see an attraction that will lead to his death or injury. A foot of silt-laden floodwater to owners whose structural opening are more than a foot above grade see a nuisance that will require some exterior cleanup, while an owner whose structural openings are less than a foot above grade may be viewing a potential financial disaster. Overflow depths from Coyote Creek are not great except in the lower reaches near San Francisco Bay where low-lying areas are inundated several feet.

Areas flooded and heights of flooding

Index maps of the flooded area plates are shown on Plates 4 through 7. Areas in the immediate vicinity of the banks of Coyote Creek that are subject to flooding are shown on Plates 8 through 28. These plates were prepared from strip topographic maps furnished by Santa Clara County. Because these maps do not extend laterally for the entire flood plain, in some reaches, a second set of flood plain maps of the entire flood plain to a smaller scale are shown on Plates 29 to 35. Flooded areas from tributaries are not shown nor are areas outside the Coyote Creek Basin even though inundation results from Coyote Creek floodflows.

Flood profiles were developed by the reach method after first determining the channel hydraulic characteristics from observations made during a period of high water that occurred in February 1969. Discharge measurements were made by other agencies and high water marks were set both by the Corps of Engineers and Santa Clara County forces. The collected data were utilized in the development of roughness coefficients. Computor programs were adjusted until the February 1969 water surface was approximated then the higher frequency floods were analyzed. Profiles of the streambed and flood heights are shown on Plates 36 to 38. Depths of flow are also given at specified cross sections of the stream. (See Plates 39 to 45.)

The water surface elevations shown on the high water profiles and cross sections contained in this report reflect only that portion of the floodflow that remains in the channel for the specified flood. As the channel approaches San Francisco Bay the channel discharge becomes almost constant for all floods. For the greater magnitude floods over 90 percent of the flow has left the Coyote channel seeking other avenues to the bay.

Depths of overflow generally are limited to one or two feet in the upper reaches but in the lower reaches subject to subsidence and tidal action of the bay the controlling depth factor becomes the bay water surface and the dikes that hold back the bay water.

GLOSSARY

Flood. An overflow of lands not normally covered by water and that are used or usable by man. Floods have two essential characteristics: the inundation of land is temporary and the land is adjacent to and inundated by overflow from a river or stream or an ocean, lake, or other body of standing water.

Normally, a "flood" is considered as any temporary rise in streamflow or stage, but not the ponding of surface water that results in significant adverse effects in the vicinity. Adverse effects may include damages from overflow of land areas, temporary backwater effects in sewers and local drainage channels, creation of unsanitary conditions or other unfavorable situations by deposition of materials in stream channels during flood recessions, rise of ground water coincident with increased streamflow, and other problems.

Flood Crest. The maximum stage or elevation reached by the waters of a flood at a given location.

Flood Peak. The maximum instantaneous discharge of a flood at a given location. It usually occurs at or near the time of the flood crest.

Flood Plain. The relatively flat area or low land adjoining the channel of a river, stream, watercourse, ocean, lake or other body of standing water, which has been or may be covered by floodwater.

Flood Profile. A graph showing the relationship of water surface elevation to location, the latter generally expressed as distance above mouth for a stream of water flowing in an open channel. It is generally drawn to show surface elevation for the crest of a specific flood, but may be prepared for conditions at a given time or stage.

Flood Stage. The stage or elevation at which overflow of the natural banks of a stream or body of water begins in the reach or area in which the elevation is measured.

Intermediate Regional Flood. A flood having an average frequency of occurrence in the order of once in 100 years although the flood may occur in any year. It is based on statistical analyses of streamflow records available for the watershed and analyses of rainfall and runoff characteristics in the "general region of the watershed."

Standard Project Flood. The flood that may be expected from the most severe combination of meteorological and hydrological conditions that are considered reasonable characteristic of the geographical region in which the drainage basin is located, excluding extremely rare combinations. Such floods, as used by the Corps of Engineers, are intended as practicable expressions of the degree of protection that should be sought in the design of flood control works, the failure of which might be disastrous.

Left Bank. The bank on the left side of a river, stream, or watercourse, looking downstream.

Right Bank. The bank on the right side of a river, stream or watercourse, looking downstream.

Underclearance. The lowest point of a bridge or other structure over or across a river, stream, or watercourse that limits the opening through which water flows. This is referred to as "low steel" in some regions.

AUTHORITY, ACKNOWLEDGEMENTS
AND
INTERPRETATION OF DATA

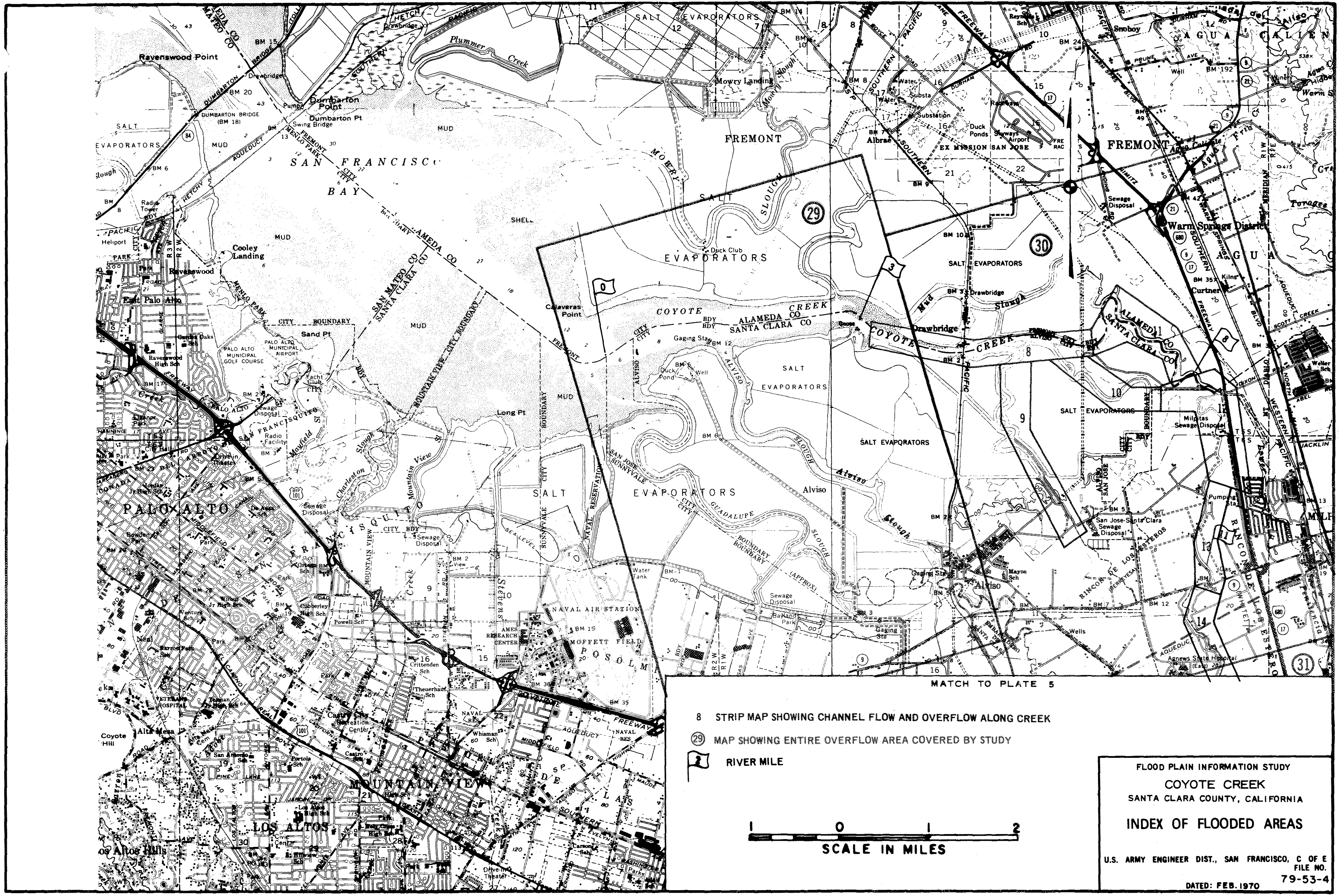
This report has been prepared in accordance with the authority granted by Section 206 of the Flood Control Act of 1960 (Public Law 86-645), as amended.

* * *

The cooperation and assistance of the Santa Clara County Flood Control and Water District, the California Department of Water Resources, and other individuals who directly or indirectly aided in the preparation of the report, are gratefully acknowledged.

* * *

This report presents the local flood situation for the Coyote Creek from San Francisco Bay to Anderson Reservoir. The San Francisco District of the Corps of Engineers will, upon request, provide technical assistance to Federal, State, and local agencies in the interpretation and use of the information contained herein, and will provide other available flood data related thereto.



MATCH TO PLATE 5

8 STRIP MAP SHOWING CHANNEL FLOW AND OVERFLOW ALONG CREEK

㉙ MAP SHOWING ENTIRE OVERFLOW AREA COVERED BY STUDY

2 RIVER MILE

1 0 1 2

SCALE IN MILES

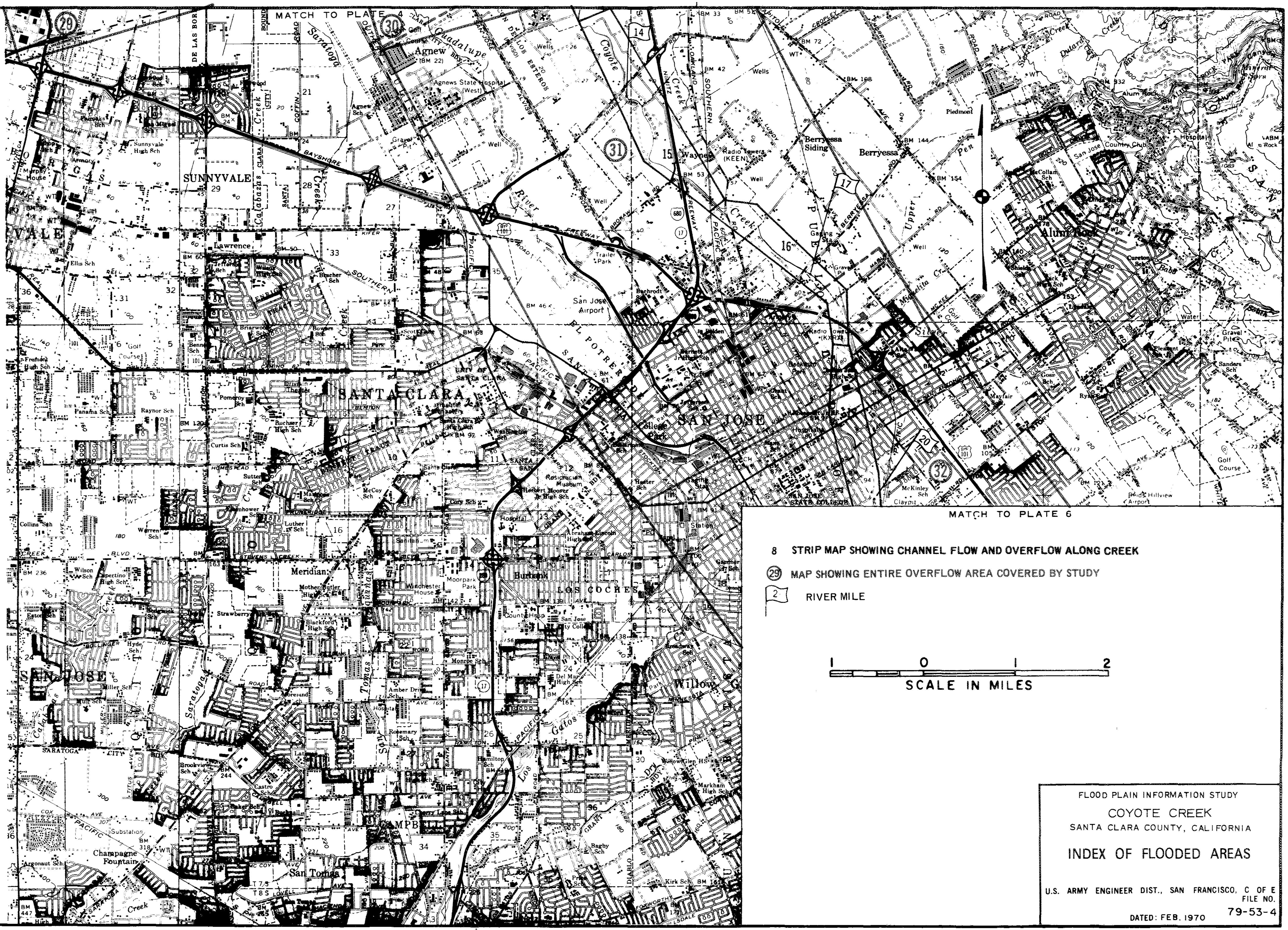
FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

INDEX OF FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
79-53-4
DATED: FEB. 1970



8 STRIP MAP SHOWING CHANNEL FLOW AND OVERFLOW ALONG CREEK

㉙ MAP SHOWING ENTIRE OVERFLOW AREA COVERED BY STUDY

2 RIVER MILE

1 0 1 2

SCALE IN MILES

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

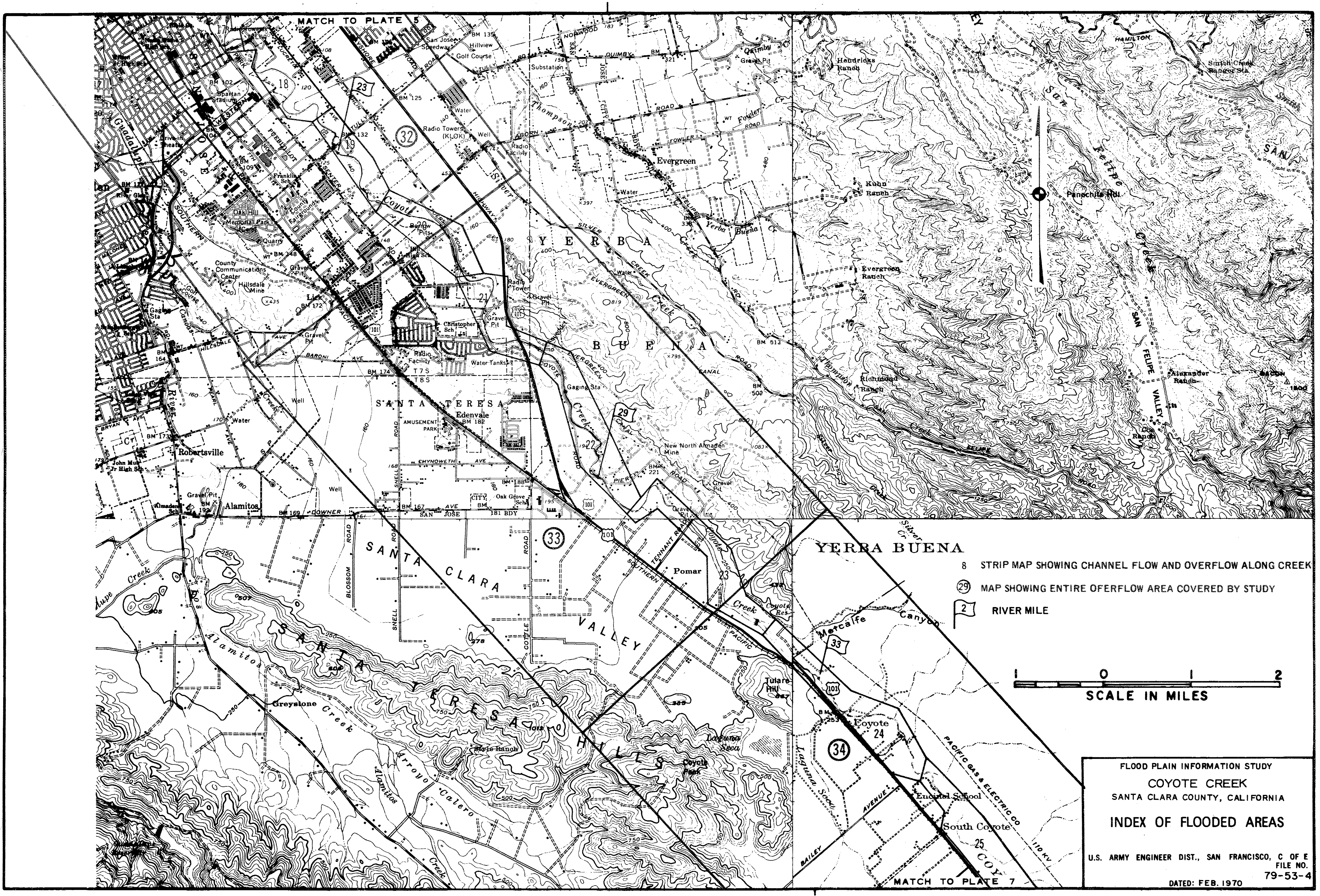
INDEX OF FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E

FILE NO.

79-53-4

DATED: FEB. 1970

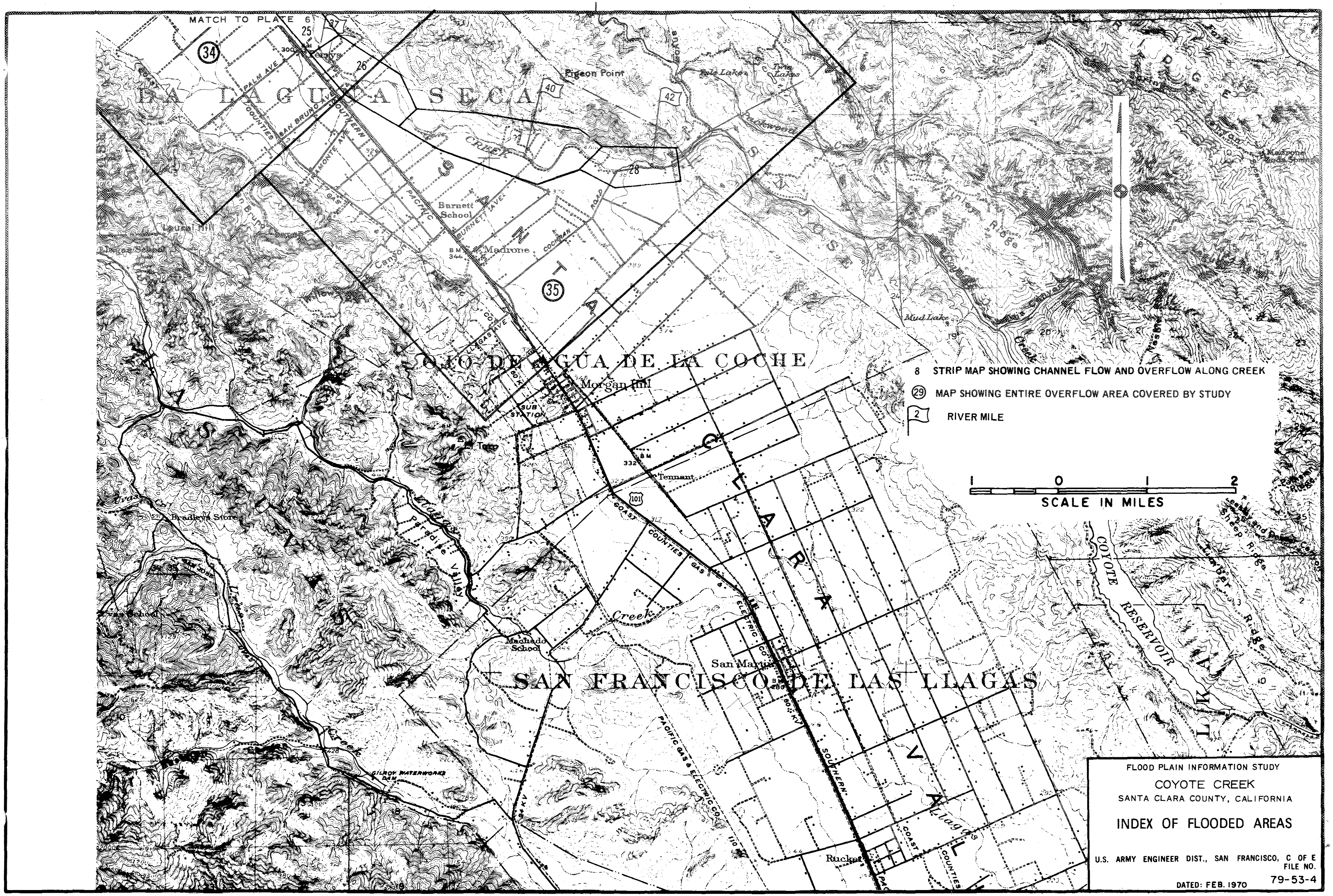


FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

INDEX OF FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
79-53-4
DATED: FEB. 1970

PLATE 6

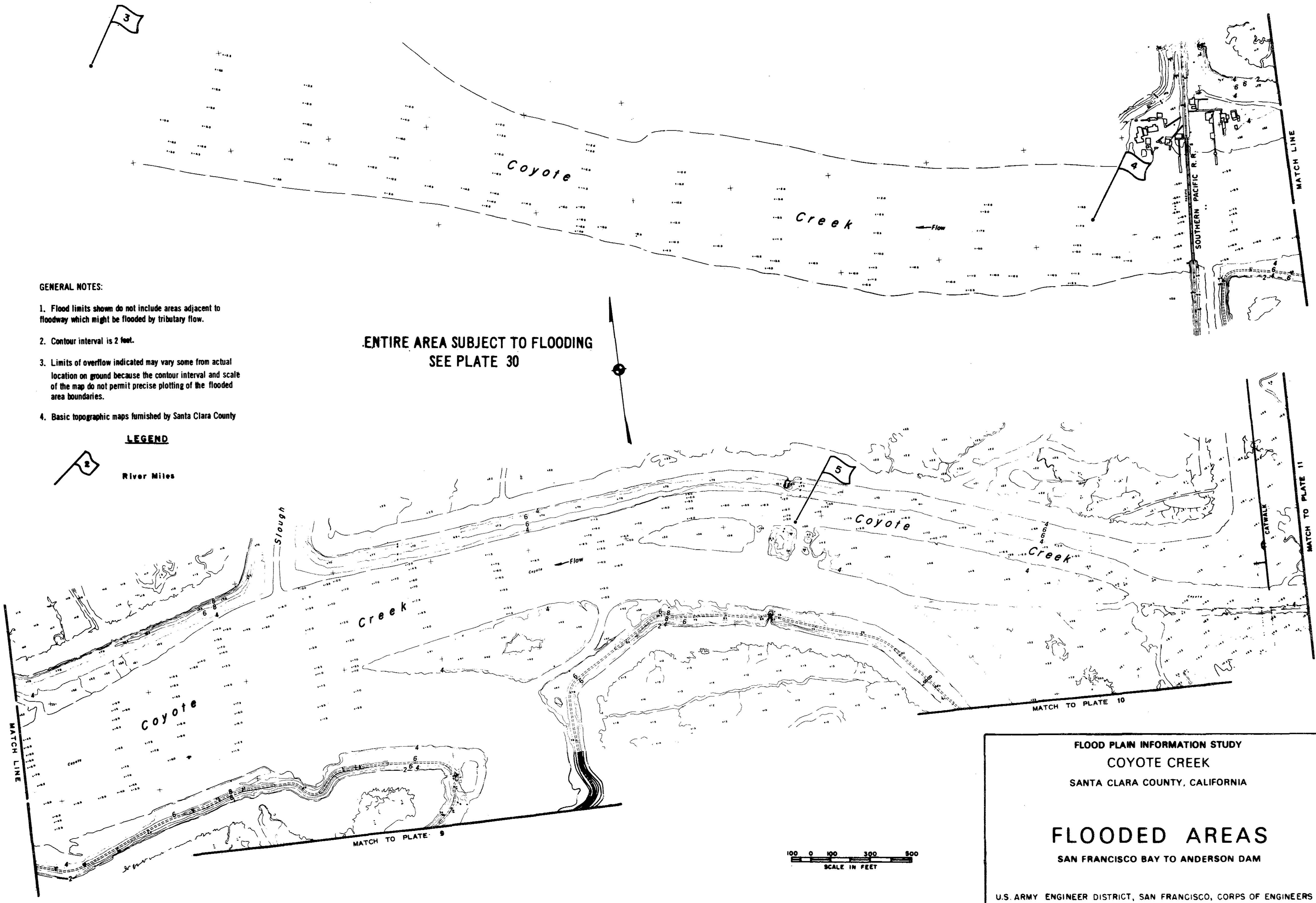


FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

INDEX OF FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
79-53-4
DATED: FEB. 1970

PLATE 7



GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

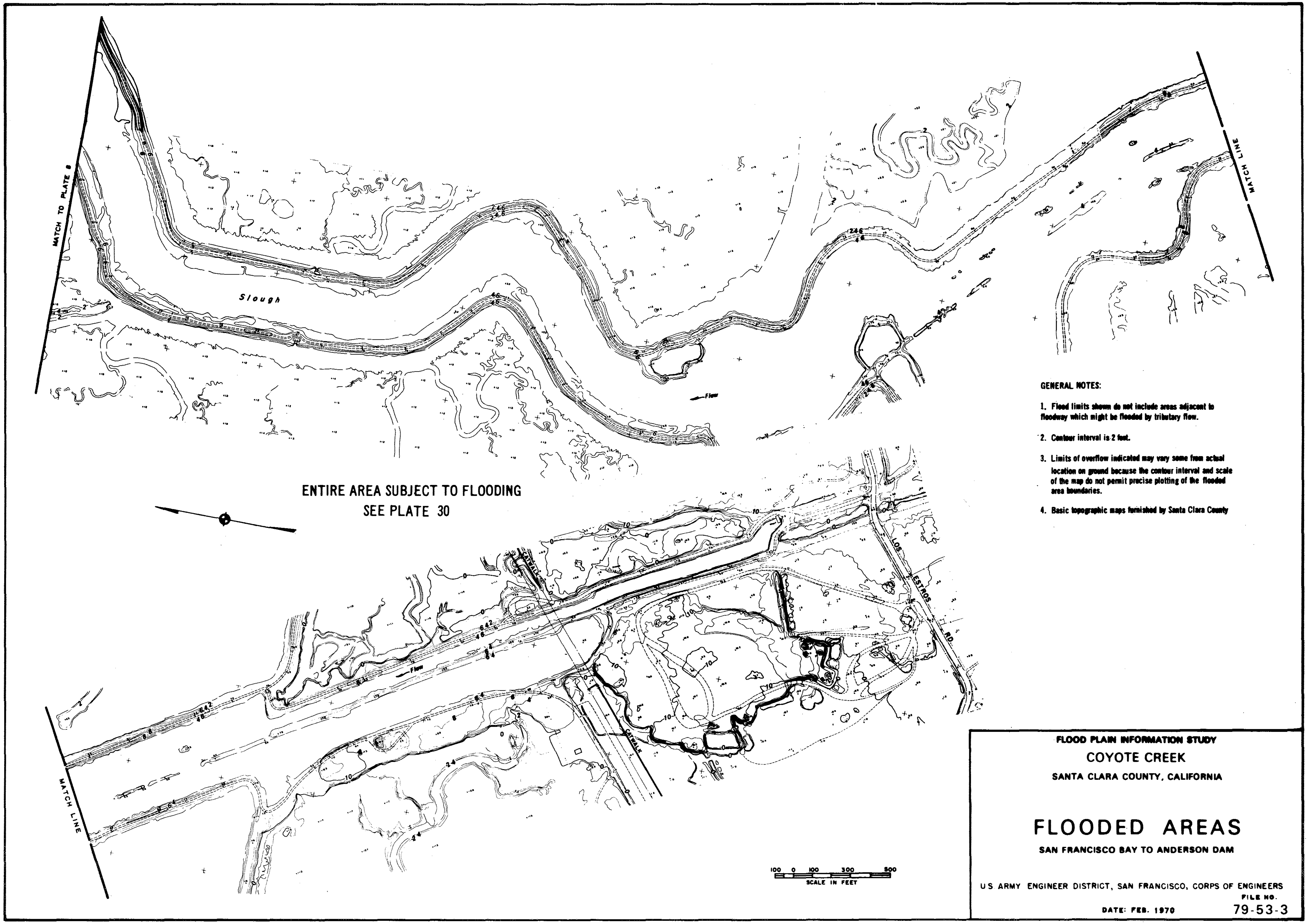
2 River Miles

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE: FEB. 1970 79-53-3



ENTIRE AREA SUBJECT TO FLOODING
SEE PLATE 30

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.

2. Contour interval is 2 feet.

3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.

4. Basic topographic maps furnished by Santa Clara County

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U S ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE: FEB. 1970 79-53-3

GENERAL NOTES:

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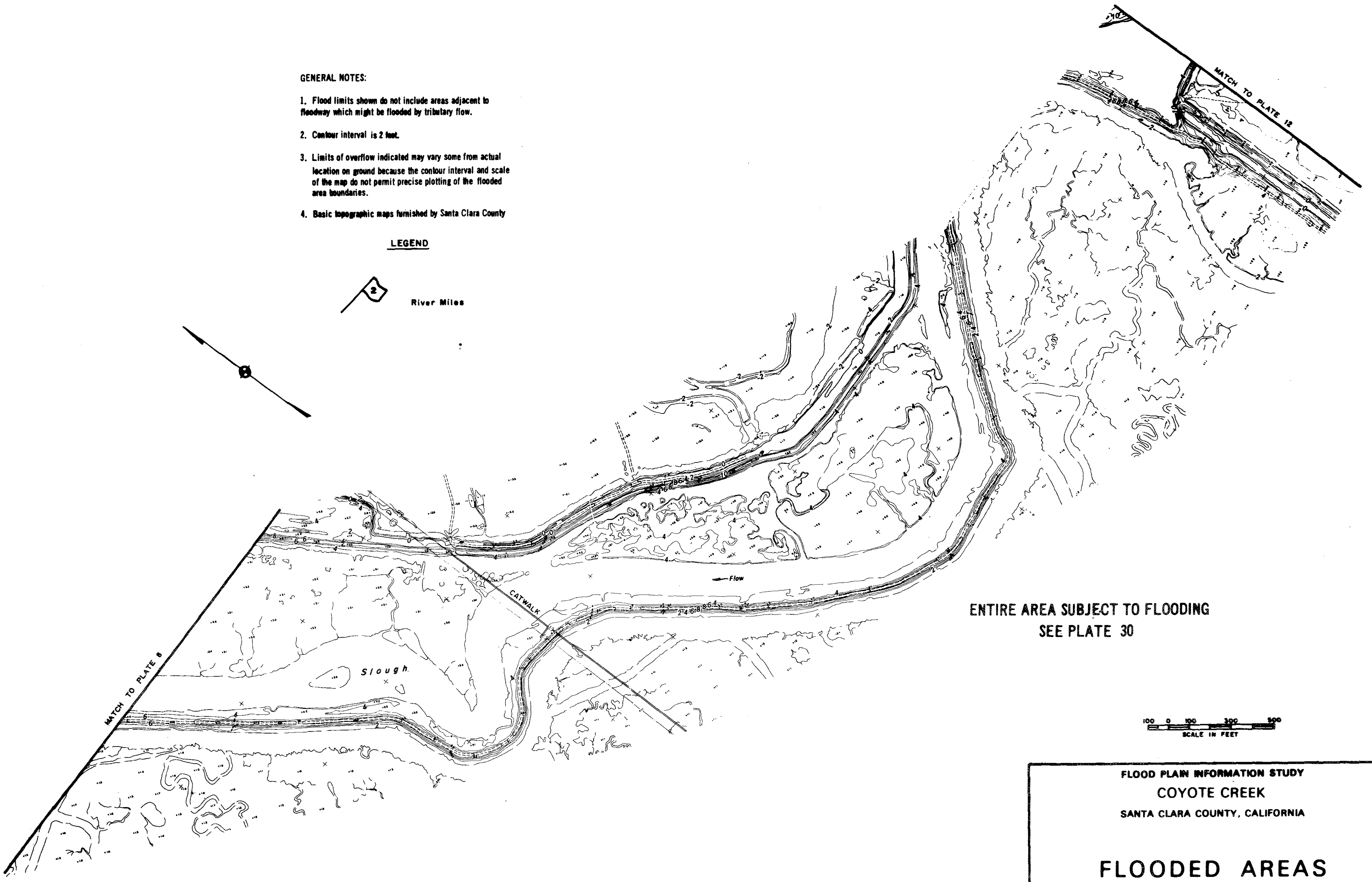
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

2 River Miles



ENTIRE AREA SUBJECT TO FLOODING
SEE PLATE 30

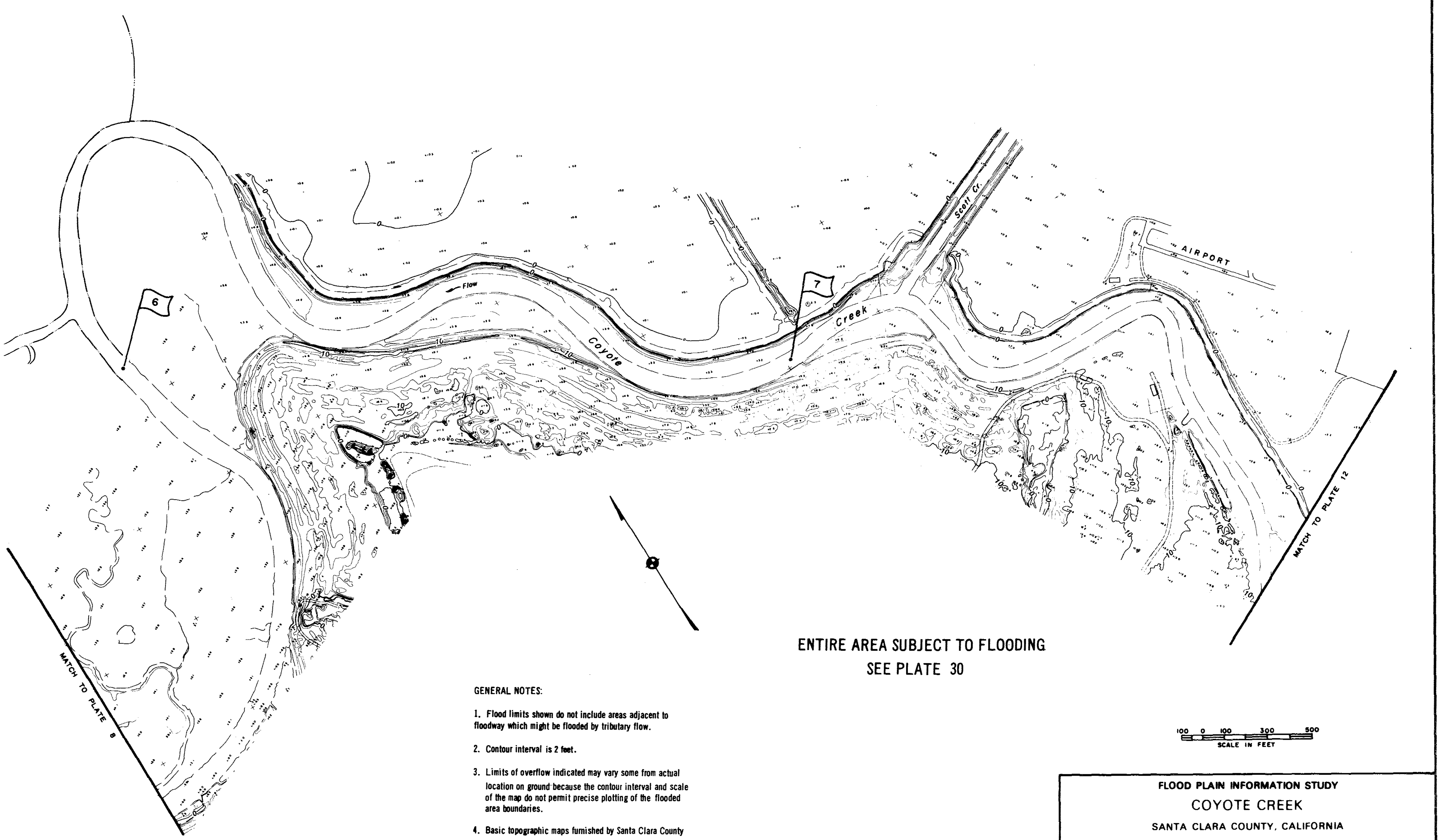
FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
DATE: FEB. 1970
FILE NO.
79-53-3

PLATE 10



ENTIRE AREA SUBJECT TO FLOODING
SEE PLATE 30

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.

2. Contour interval is 2 feet.

3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.

4. Basic topographic maps furnished by Santa Clara County

LEGEND

2 River Miles

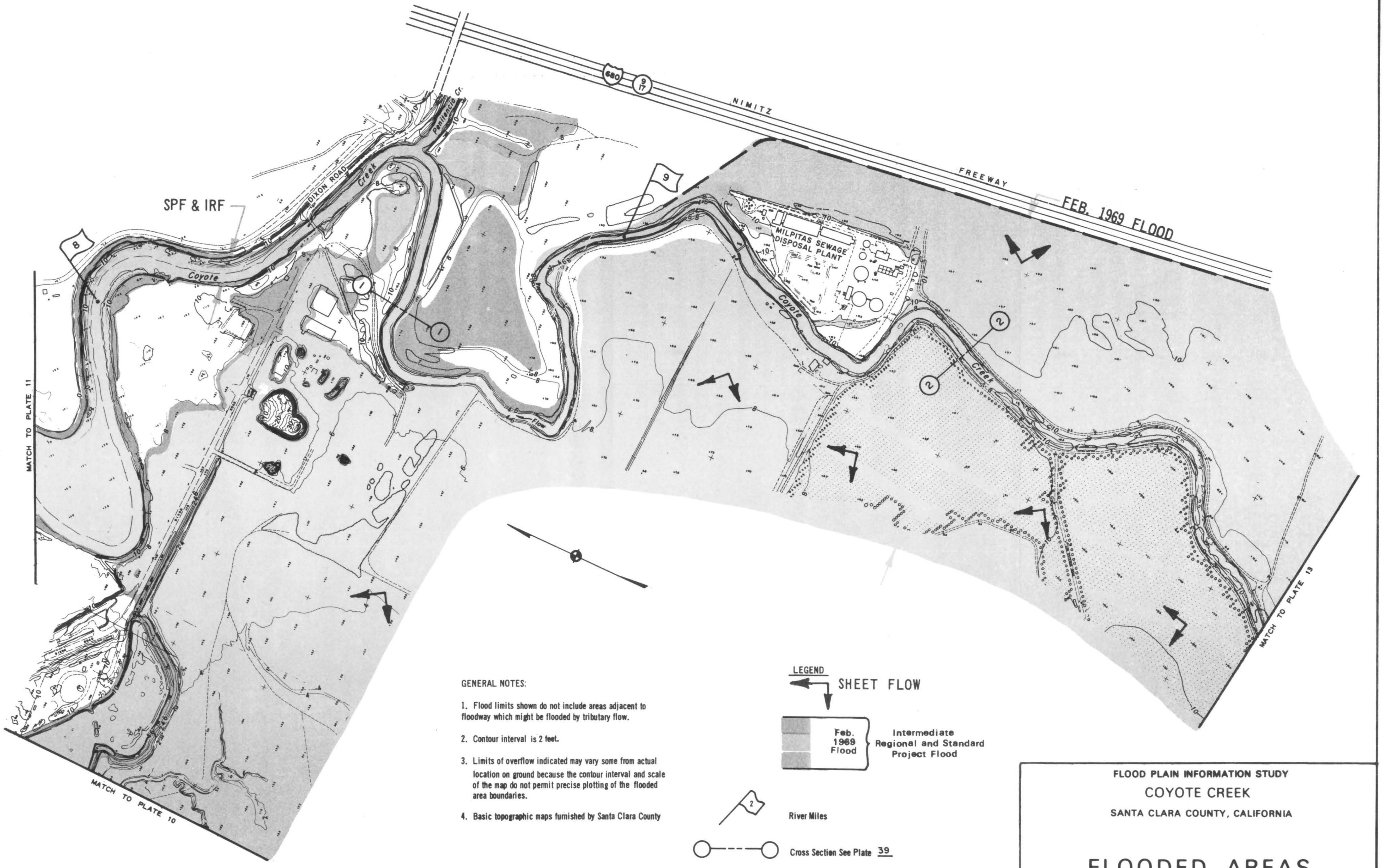
100 0 100 300 500
SCALE IN FEET

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
DATE: FEB. 1970
FILE NO.
79-53-3



GENERAL NOTES:

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2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

SHEET FLOW

Feb. 1969 Flood

Intermediate Regional and Standard Project Flood

River Miles

Cross Section See Plate 39

100 0 100 300 500

SCALE IN FEET

FOR EXTENT OF FLOODING SEE PLATE 30

APPROXIMATE LIMITS OF FLOODING

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

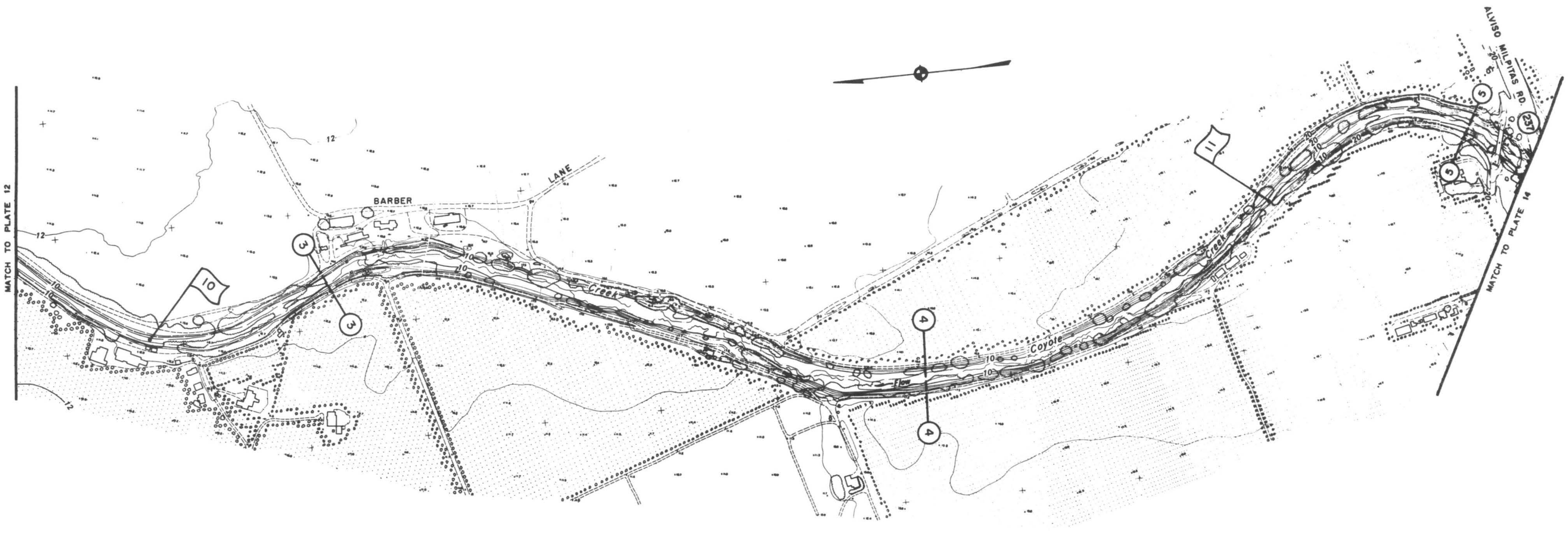
SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

FILE NO.

DATE: FEB. 1970

79-53-3



FOR EXTENT OF FLOODING
SEE PLATES 30 & 31

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.

2. Contour interval is 2 feet.

3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.

4. Basic topographic maps furnished by Santa Clara County

LEGEND

2 River Miles

○---○ Cross Section See Plate 39

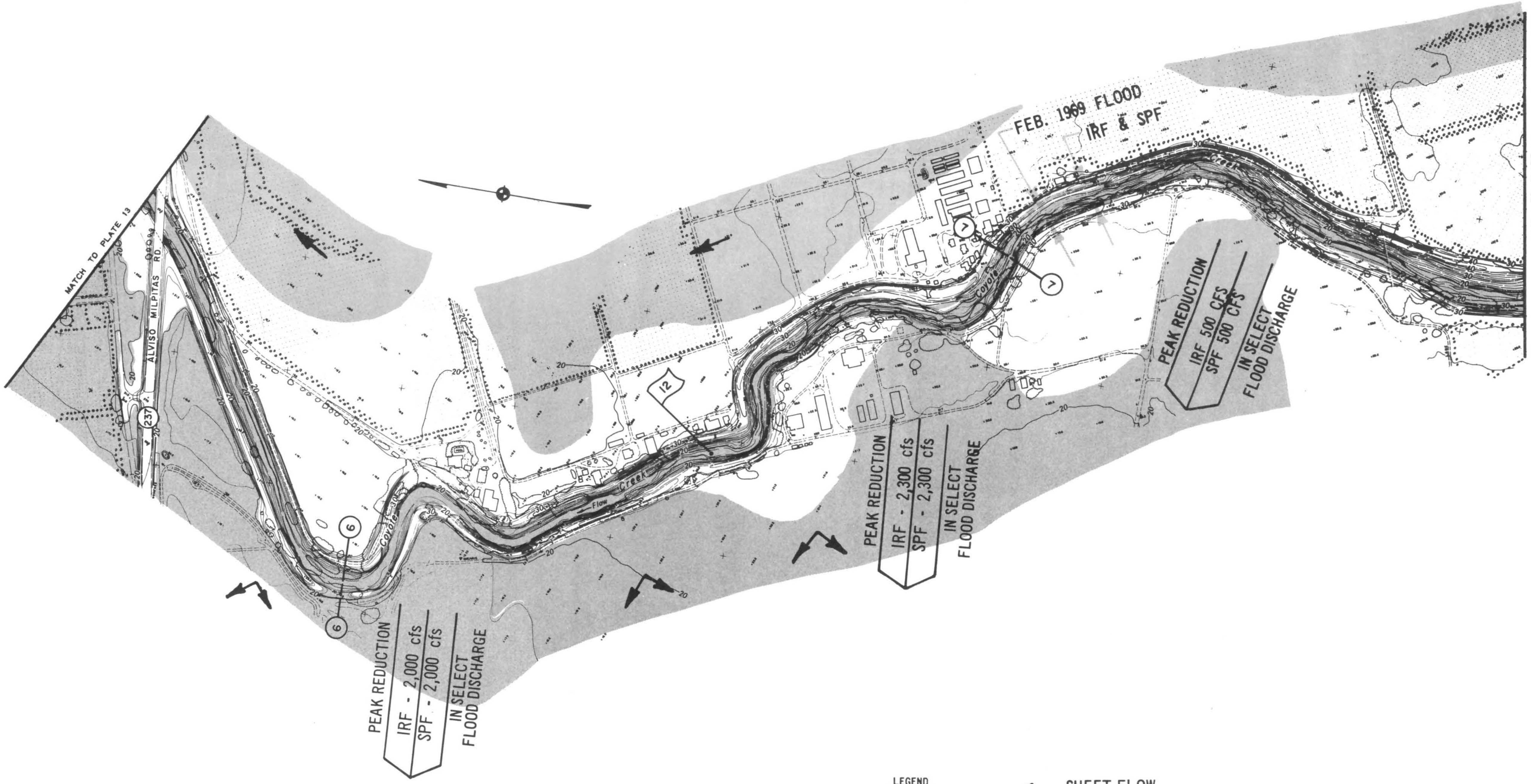
100 0 100 300 500
SCALE IN FEET

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
79-53-3
DATE: FEB. 1970



FOR EXTENT OF FLOODING SEE PLATE 30

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

▨ Feb. 1969 Flood
▨ Intermediate Regional and Standard Project Flood

SHEET FLOW

River Miles

Cross Section See Plate 39

100 0 100 300 500
SCALE IN FEET

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

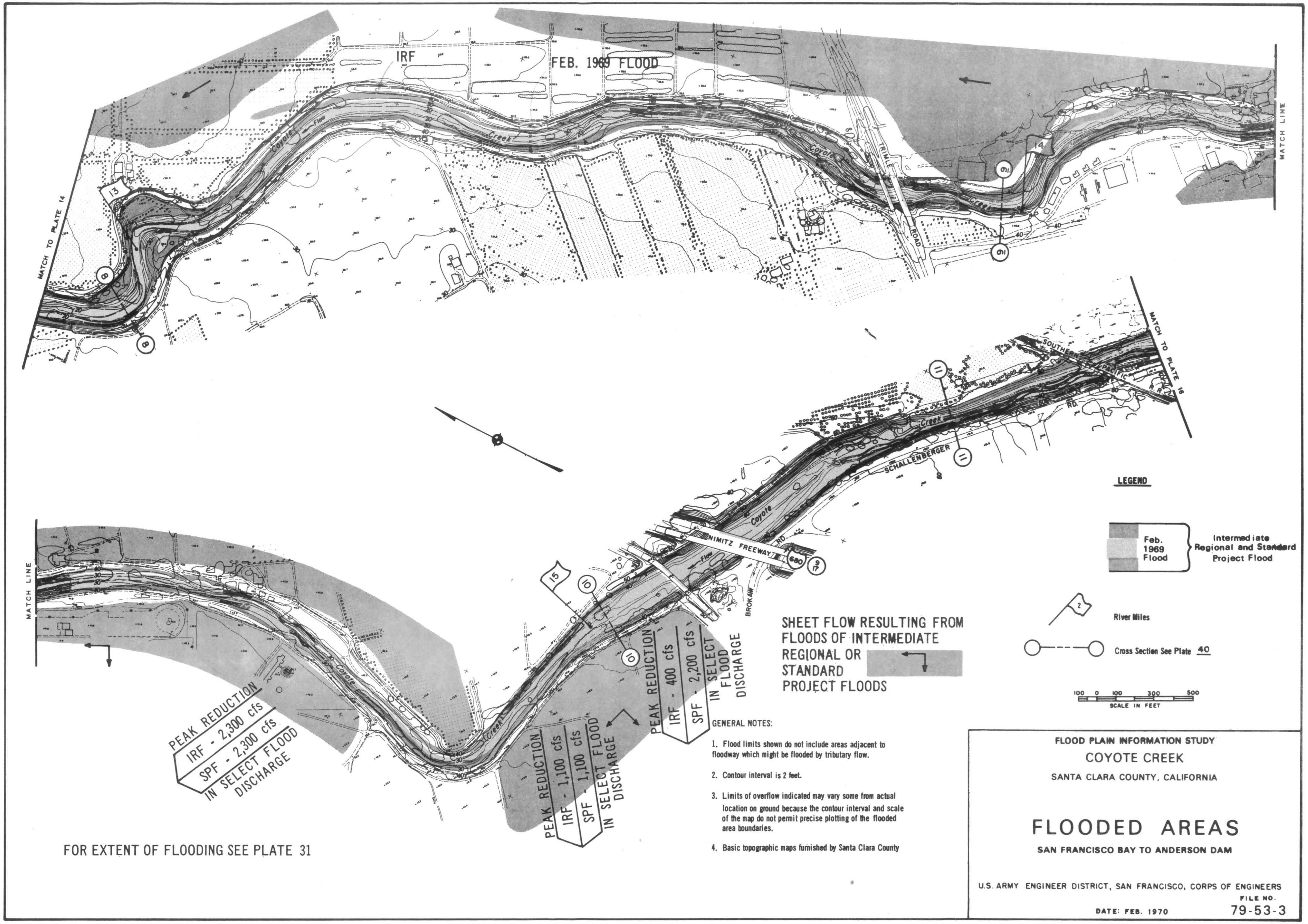
SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

DATE: FEB. 1970

FILE NO.
79-53-3

PLATE 14


IRF
FEB. 1969 FLOOD
MATCH TO PLATE 14
MATCH LINE
MATCH TO PLATE 16
MATCH LINE
Coyote
Creek
TRIMBLE ROAD
NIMITZ FREEWAY
SCHALLENBERGER RD
BROKAW RD
SOUTHERN PACIFIC R.R.
13
14
15
8
9
10
11
680
SHEET FLOW RESULTING FROM FLOODS OF INTERMEDIATE REGIONAL OR STANDARD PROJECT FLOODS
PEAK REDUCTION IRF - 2,300 cfs SPF - 2,300 cfs IN SELECT FLOOD DISCHARGE
PEAK REDUCTION IRF - 1,100 cfs SPF - 1,100 cfs IN SELECT FLOOD DISCHARGE
PEAK REDUCTION IRF - 400 cfs SPF - 2,200 cfs IN SELECT FLOOD DISCHARGE
FOR EXTENT OF FLOODING SEE PLATE 31
LEGEND
Feb. 1969 Flood
Intermediate Regional and Standard Project Flood
River Miles
Cross Section See Plate 40
100 0 100 300 500
SCALE IN FEET

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

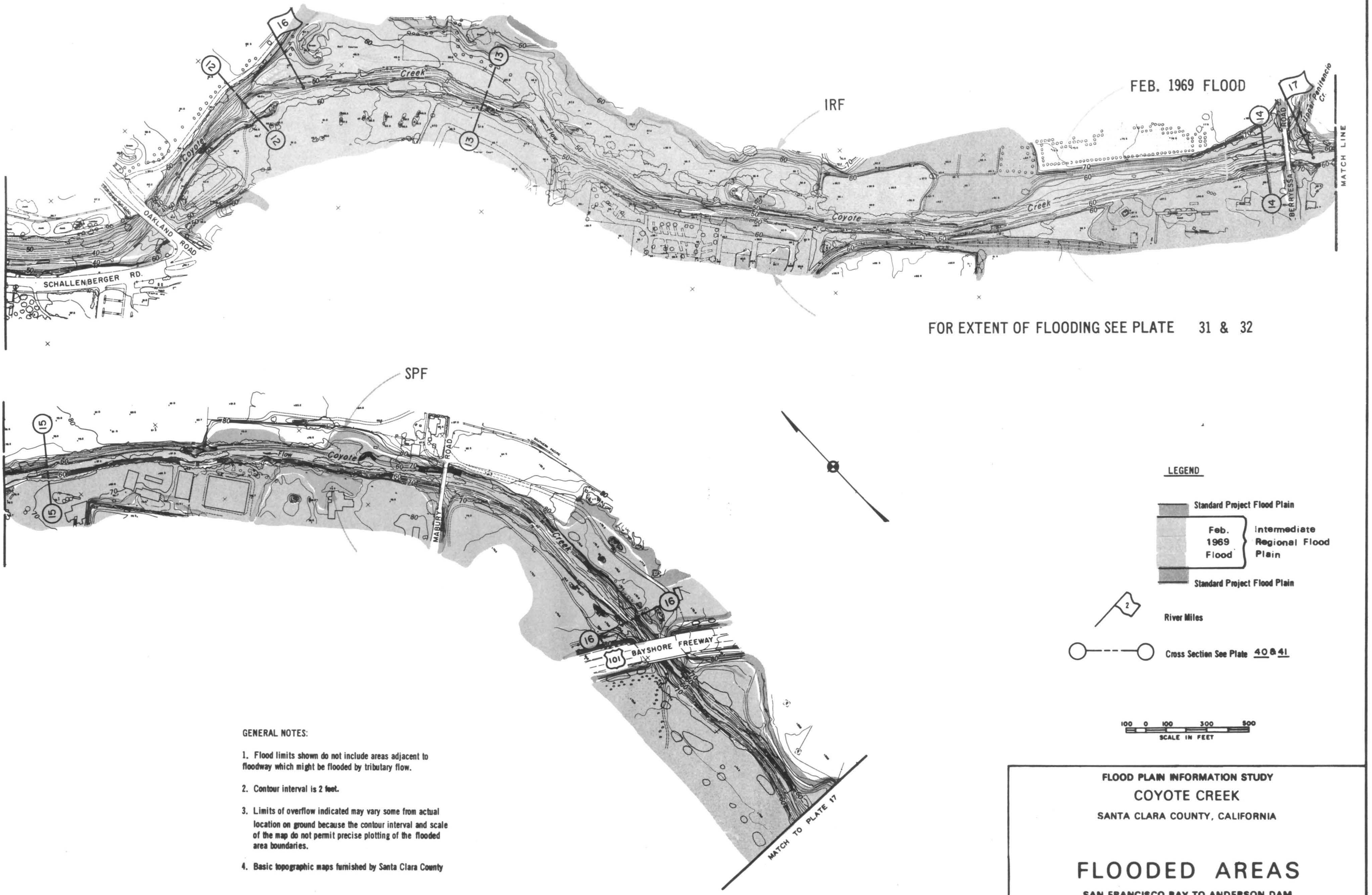
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

FILE NO.
DATE: FEB. 1970 79-53-3



GENERAL NOTES:

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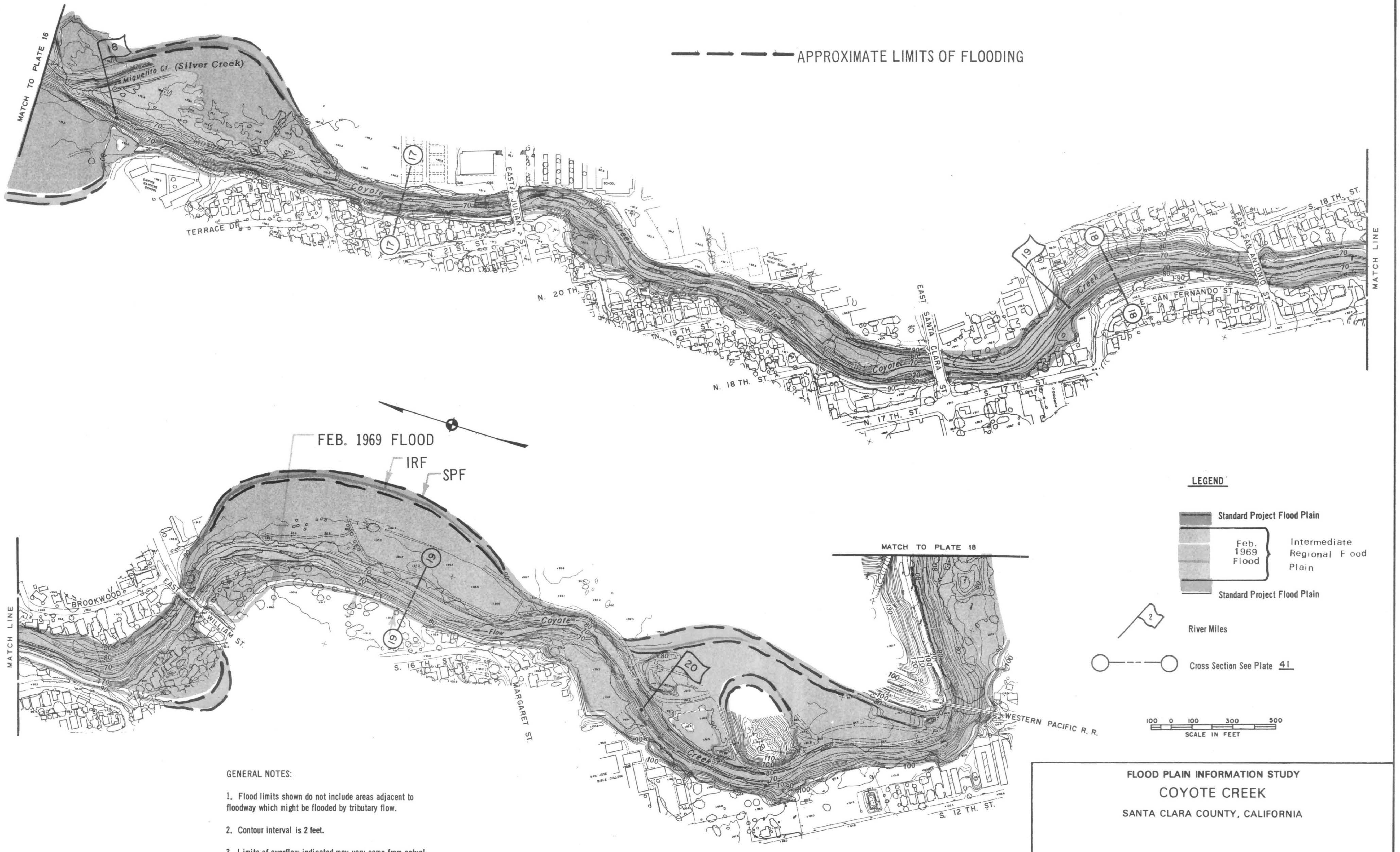
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO:
DATE: FEB. 1970 79-53-3



GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

FOR EXTENT OF FLOODING SEE PLATE 32

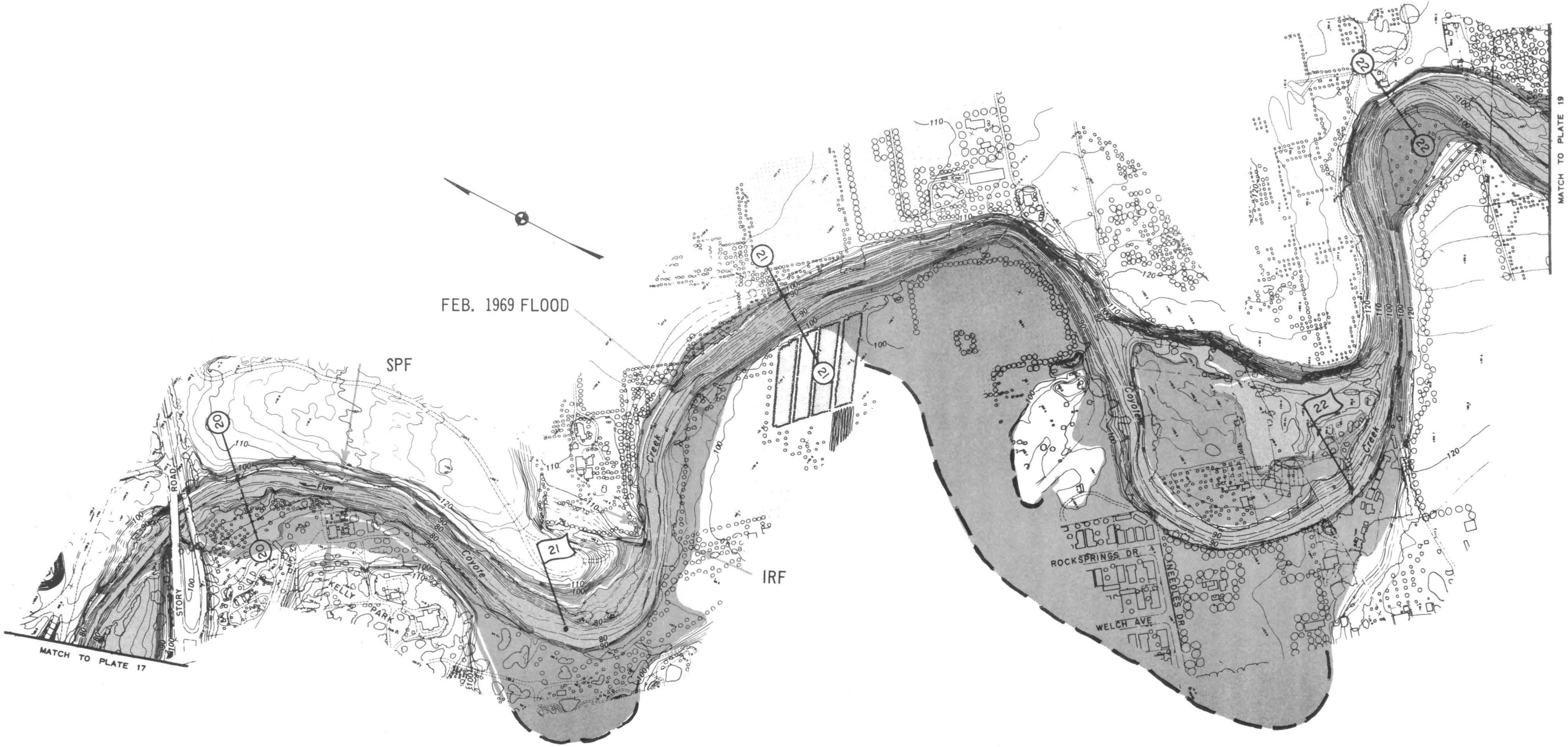
FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE: FEB. 1970 79-53-3

PLATE 17



— — — APPROXIMATE LIMITS OF FLOODING

FOR EXTENT OF FLOODING SEE PLATE 32

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

▨ Standard Project Flood Plain

▨ Feb. 1969 Flood } Intermediate Regional Flood Plain

▨ Standard Project Flood Plain

River Miles

○- - -○ Cross Section See Plate 41 & 42

100 0 100 300 500
SCALE IN FEET

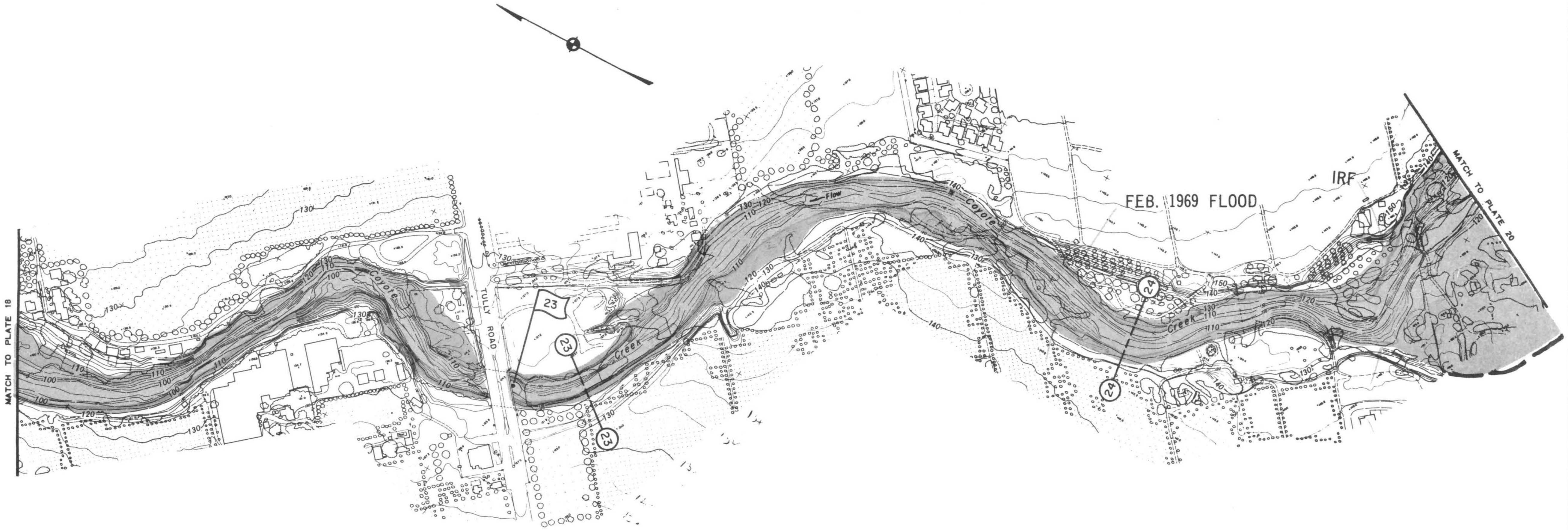
FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE: FEB. 1970 79-53-3

PLATE 18



— — — APPROXIMATE LIMITS OF FLOODING

FOR EXTENT OF FLOODING SEE PLATE 32

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

▨ Feb. 1969 Flood } Intermediate Regional and Standard Project Flood

River Miles

○- - -○ Cross Section See Plate 42

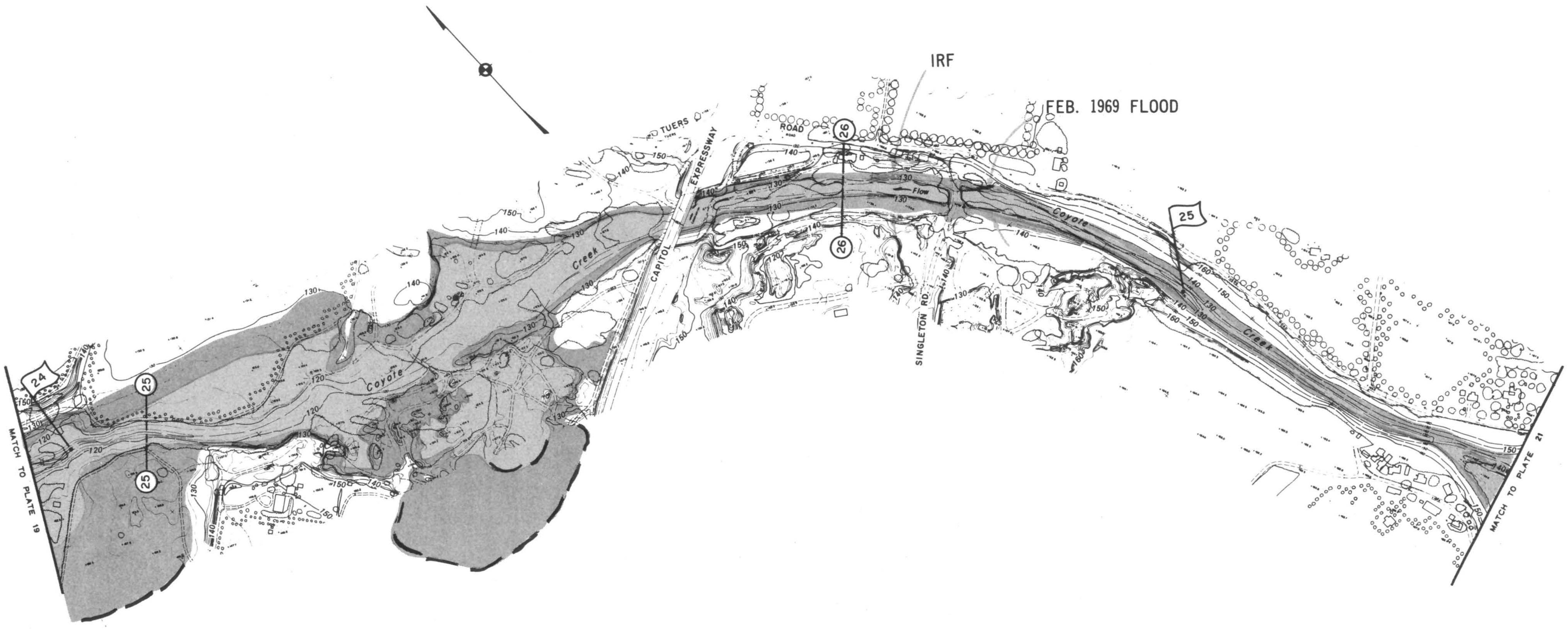
100 0 100 300 500
SCALE IN FEET

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
79-53-3
DATE: FEB. 1970



— — — APPROXIMATE LIMITS OF FLOODING

FOR EXTENT OF FLOODING SEE PLATE 33

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

▨ Feb. 1969 Flood } Intermediate Regional and Standard Project Flood

2 River Miles

○---○ Cross Section See Plate 42

100 0 100 300 500
SCALE IN FEET

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

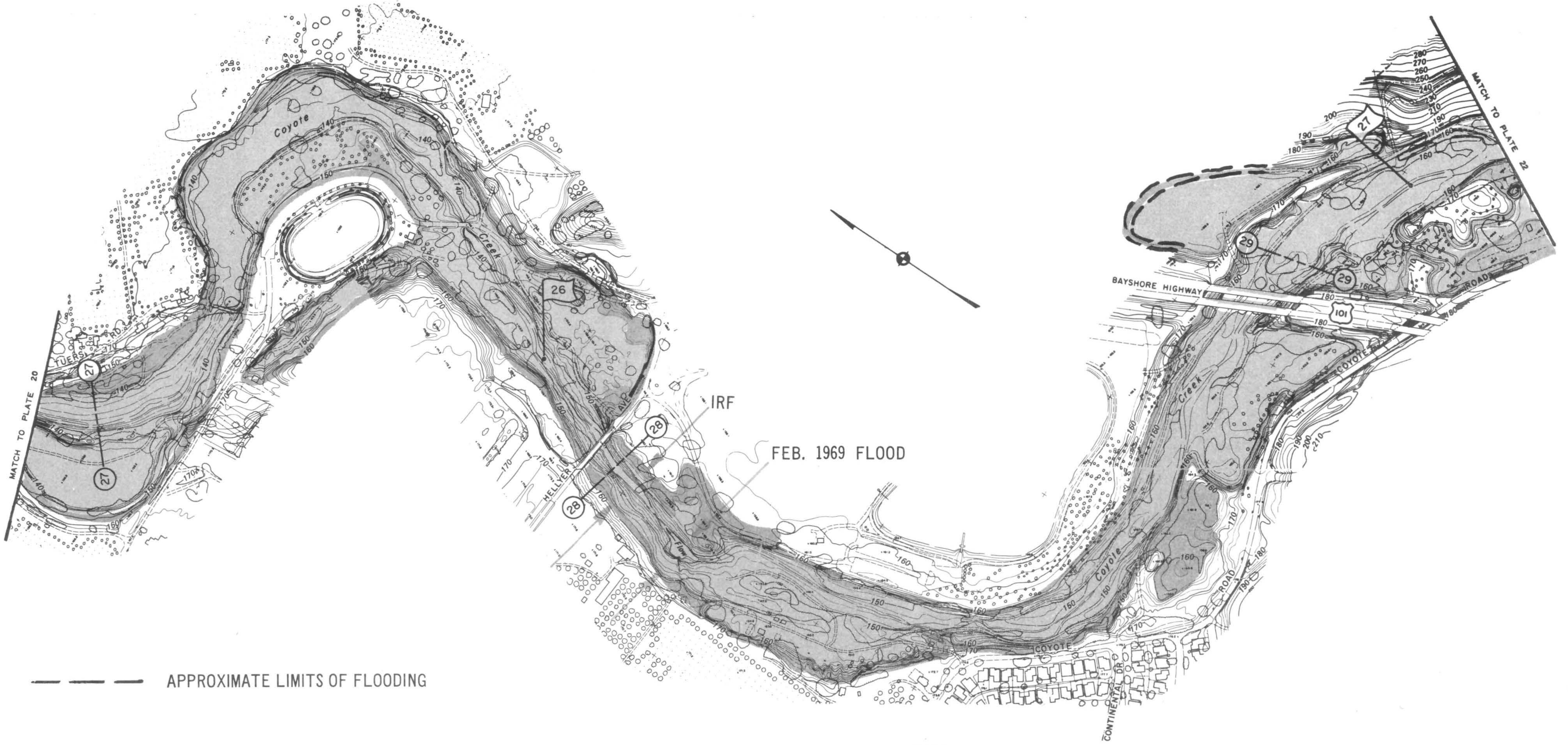
FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

FILE NO
79-53-3

DATE: FEB. 1970



— — — APPROXIMATE LIMITS OF FLOODING

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.

2. Contour interval is 2 feet.

3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.

4. Basic topographic maps furnished by Santa Clara County

LEGEND

▨	Feb. 1969 Flood	Intermediate Regional and Standard Project Flood
▨		
▨		

River Miles

○- - -○ Cross Section See Plate 42 & 43

100 0 100 300 500
SCALE IN FEET

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

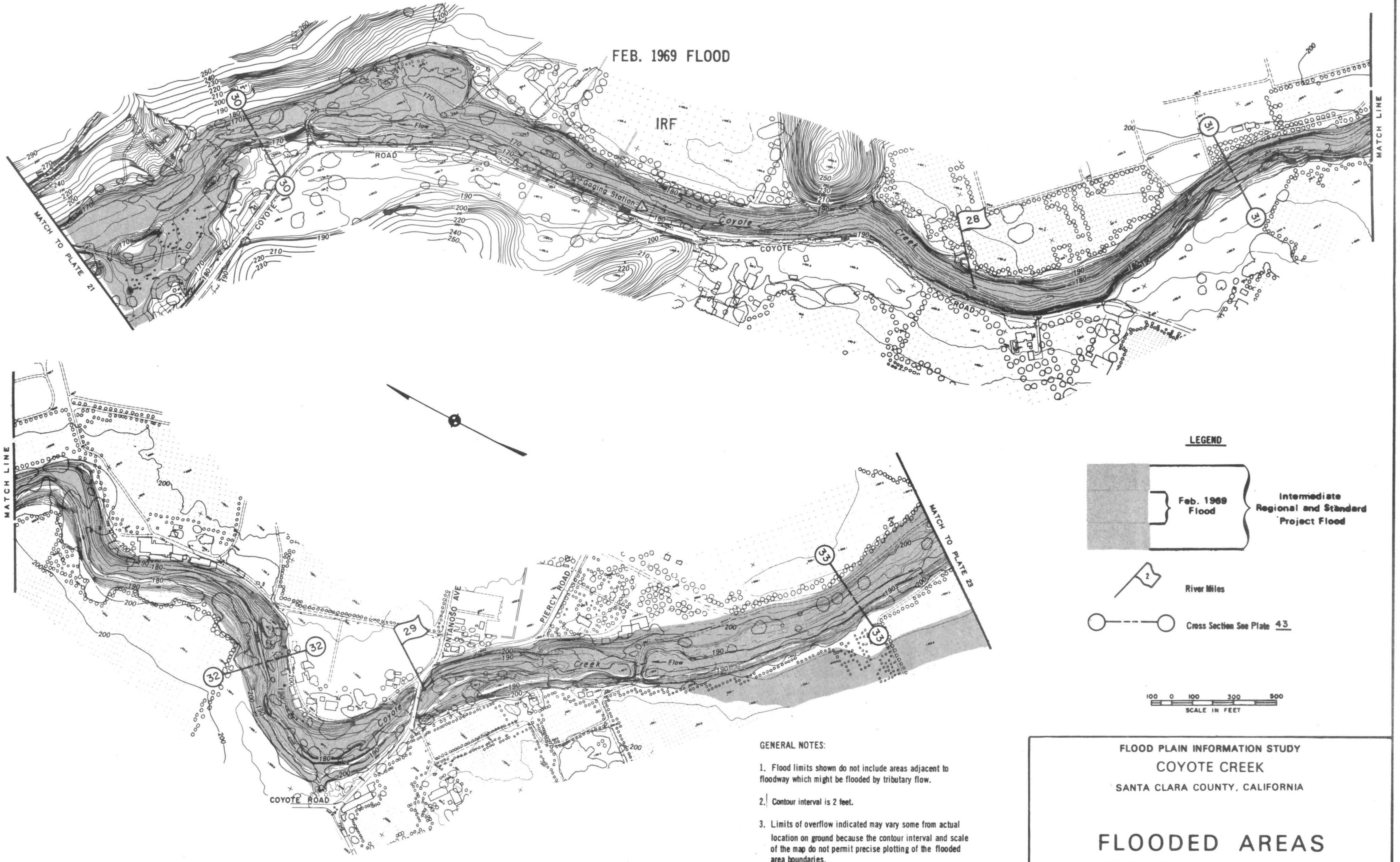
SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

FILE NO.
79-53-3

DATE: FEB. 1970

PLATE 21



GENERAL NOTES:

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2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

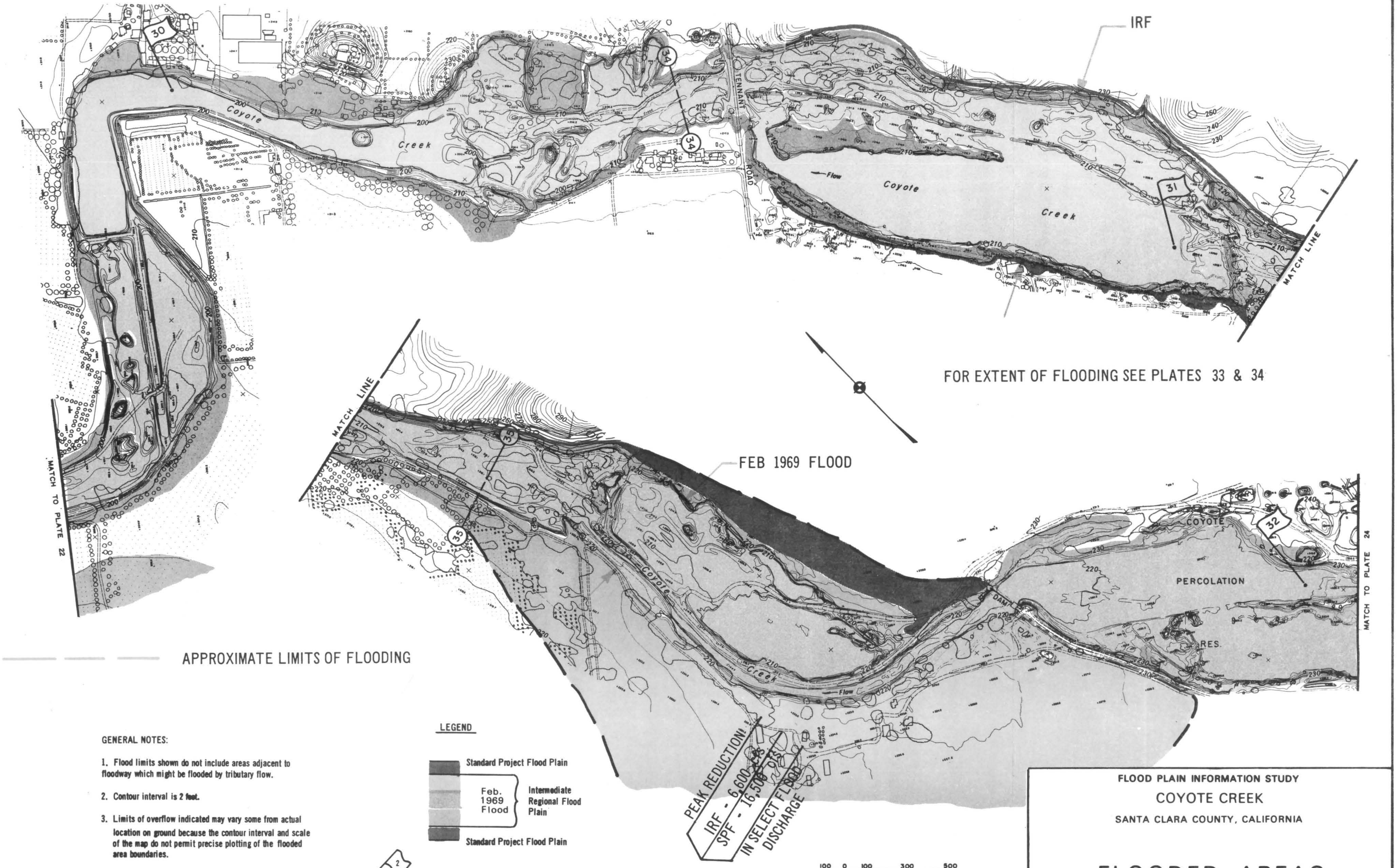
FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE: FEB. 1970
79-53-3

PLATE 22



GENERAL NOTES:

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2. Contour interval is 2 feet.
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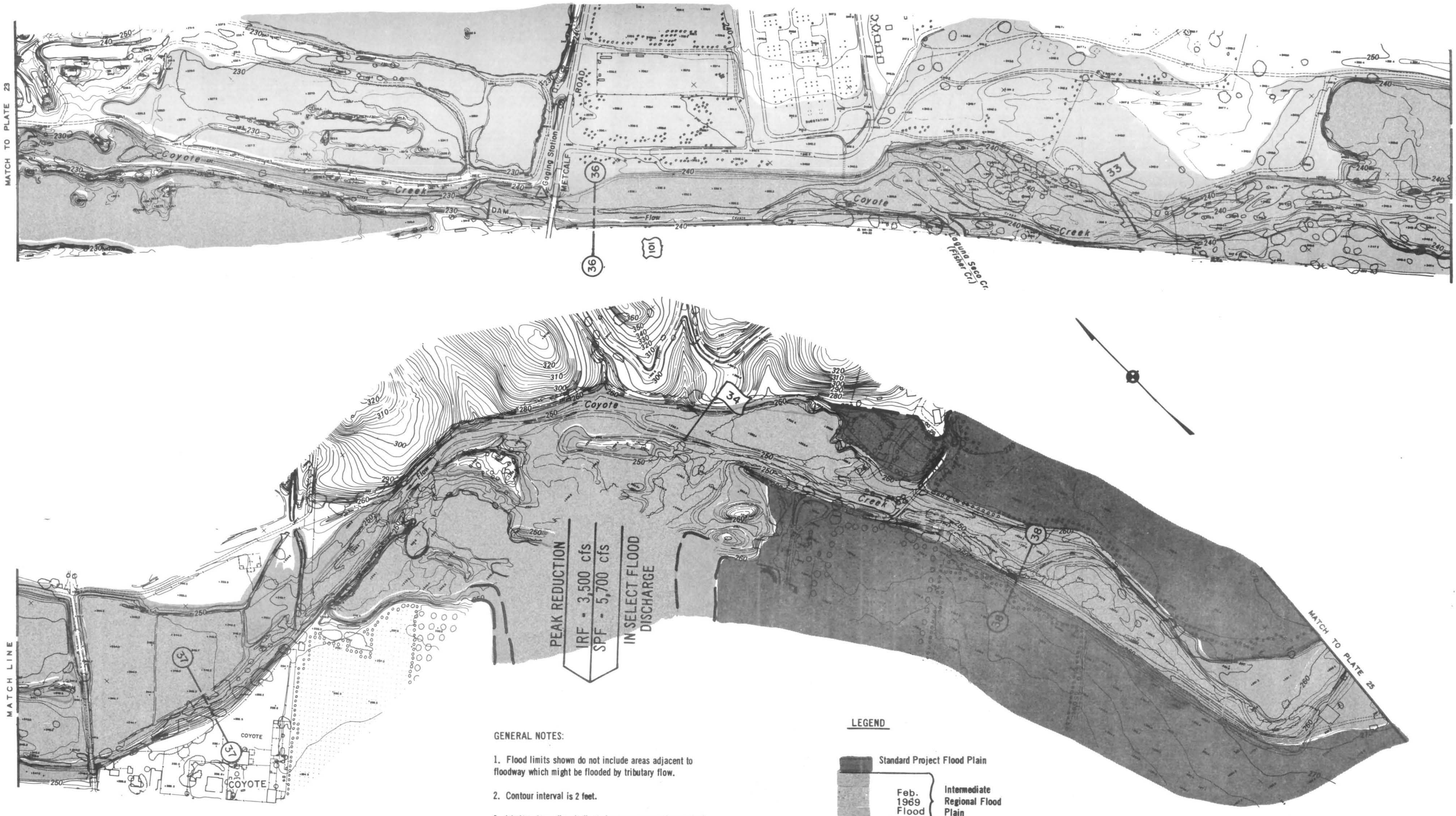
4. Basic topographic maps furnished by Santa Clara County

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE: FEB. 1970 79-53-3



GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

■ Standard Project Flood Plain

▨ Feb. 1969 Flood } Intermediate Regional Flood Plain

■ Standard Project Flood Plain

River Miles

Cross Section See Plate 44

100 0 100 300 500
SCALE IN FEET

— — — APPROXIMATE LIMITS OF FLOODING

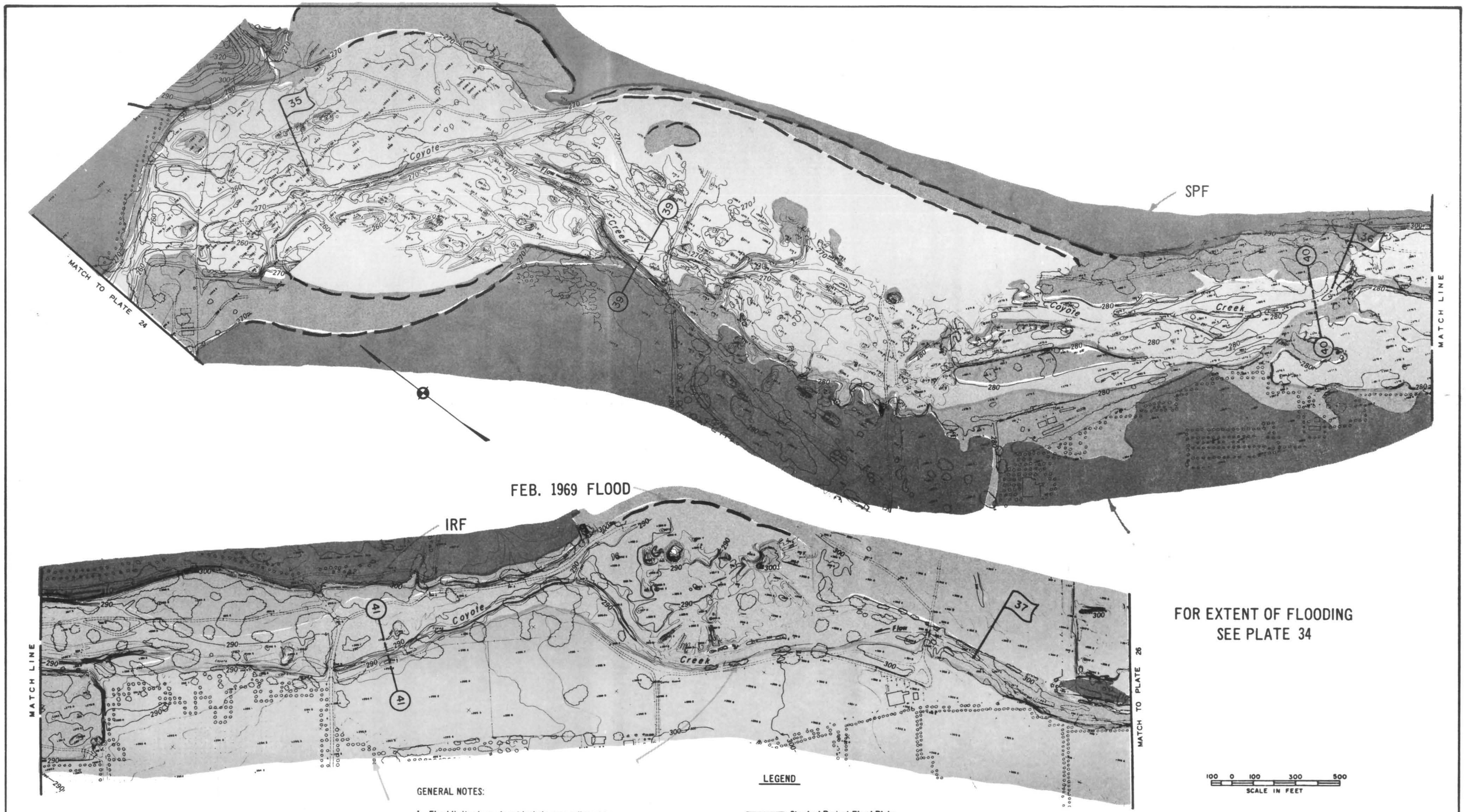
FOR EXTENT OF FLOODING SEE PLATE 34

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE: FEB. 1970 79-53-3



FOR EXTENT OF FLOODING SEE PLATE 34

— — — APPROXIMATE LIMITS OF FLOODING

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.

2. Contour interval is 2 feet.

3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.

4. Basic topographic maps furnished by Santa Clara County

LEGEND

▨ Standard Project Flood Plain

▨ Feb. 1969 Flood } Intermediate Regional Flood Plain

▨ Standard Project Flood Plain

River Miles

Cross Section See Plate 44

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

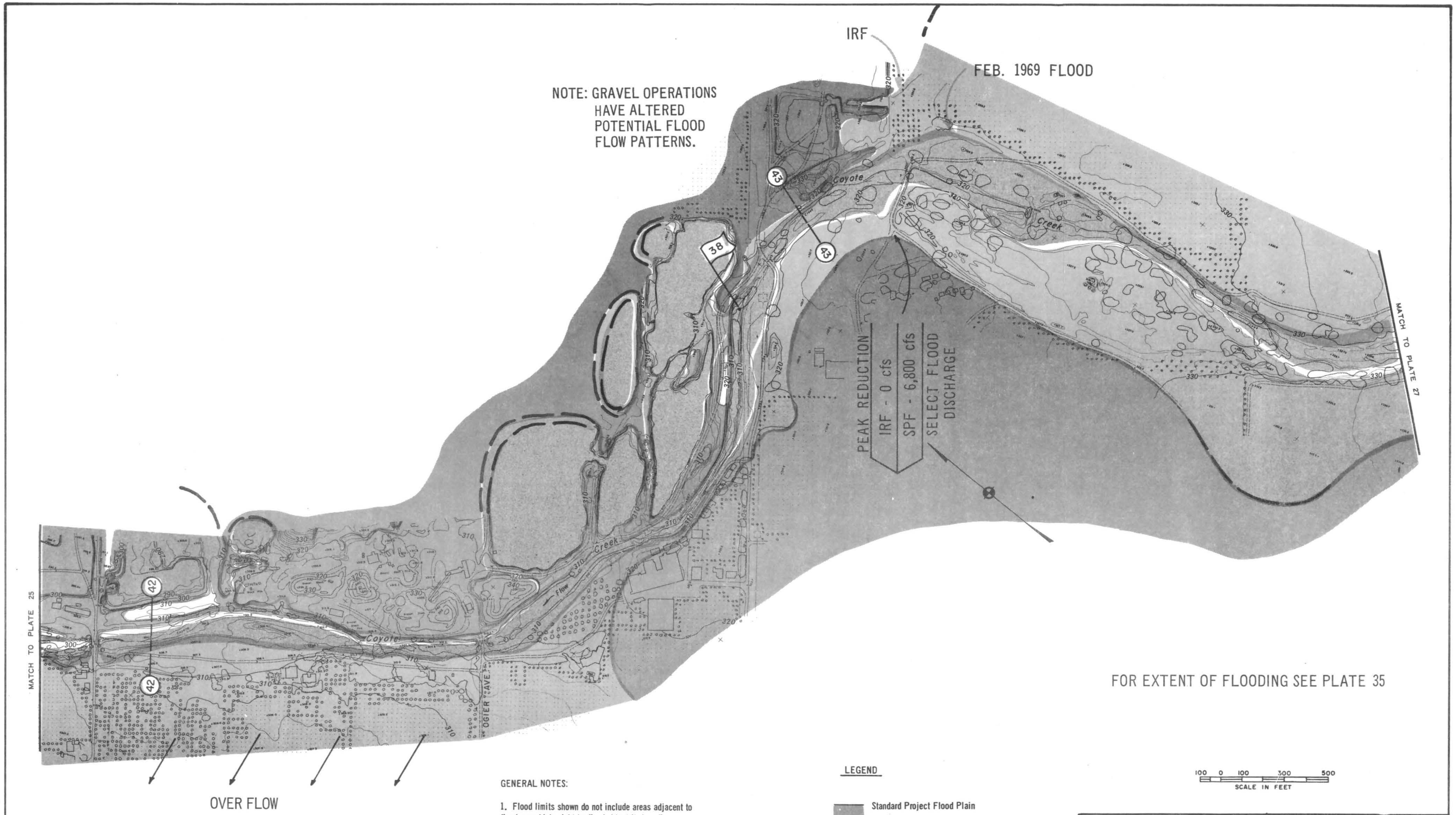
FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

DATE: FEB. 1970

FILE NO. 79-53-3



— — — APPROXIMATE LIMITS OF FLOODING

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

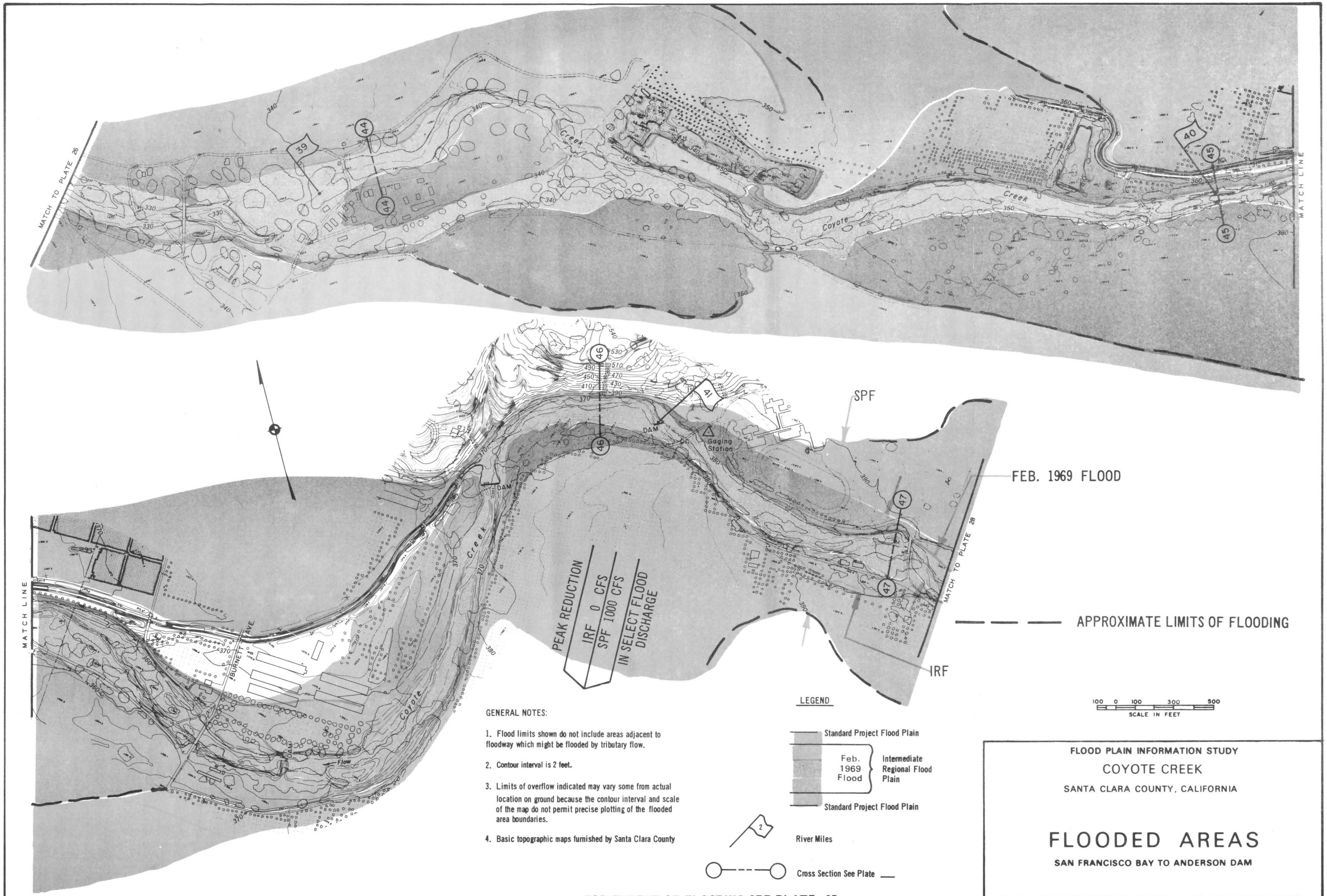
▨ Standard Project Flood Plain
▨ Feb. 1969 Flood } Intermediate Regional Flood Plain
▨ Standard Project Flood Plain
River Miles
○---○ Cross Section See Plate 44 & 45

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE: FEB. 1970 79-53-3



GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

LEGEND

Standard Project Flood Plain

Feb. 1969 Flood } Intermediate Regional Flood Plain

Standard Project Flood Plain

River Miles

Cross Section See Plate ___

FOR EXTENT OF FLOODING SEE PLATE 35

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

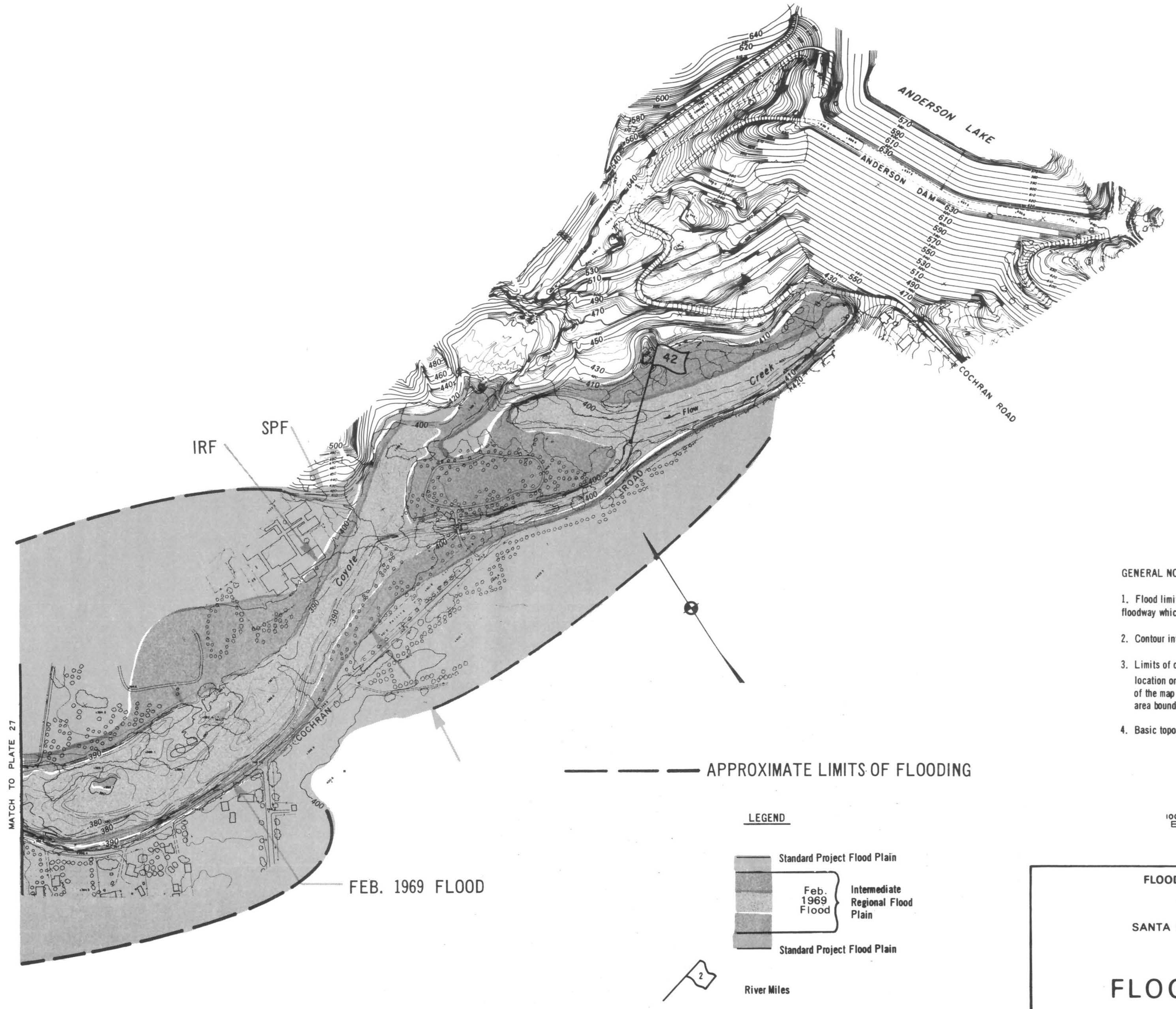
FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

FILE NO.

DATE: FEB. 1970 79-53-3



GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 2 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps furnished by Santa Clara County

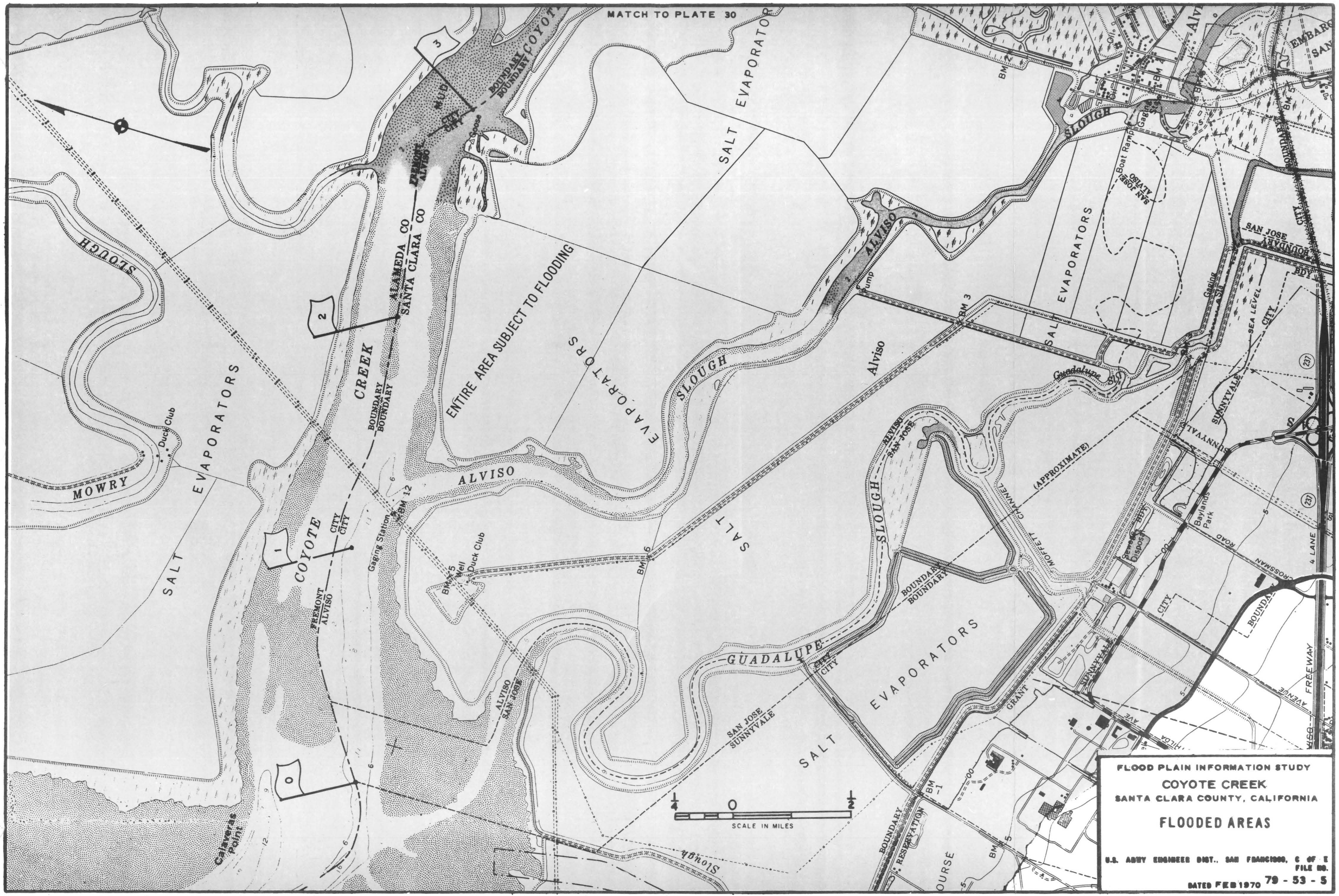
100 0 100 300 500
SCALE IN FEET

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

SAN FRANCISCO BAY TO ANDERSON DAM

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
DATE: FEB. 1970
FILE NO. 79-53-3



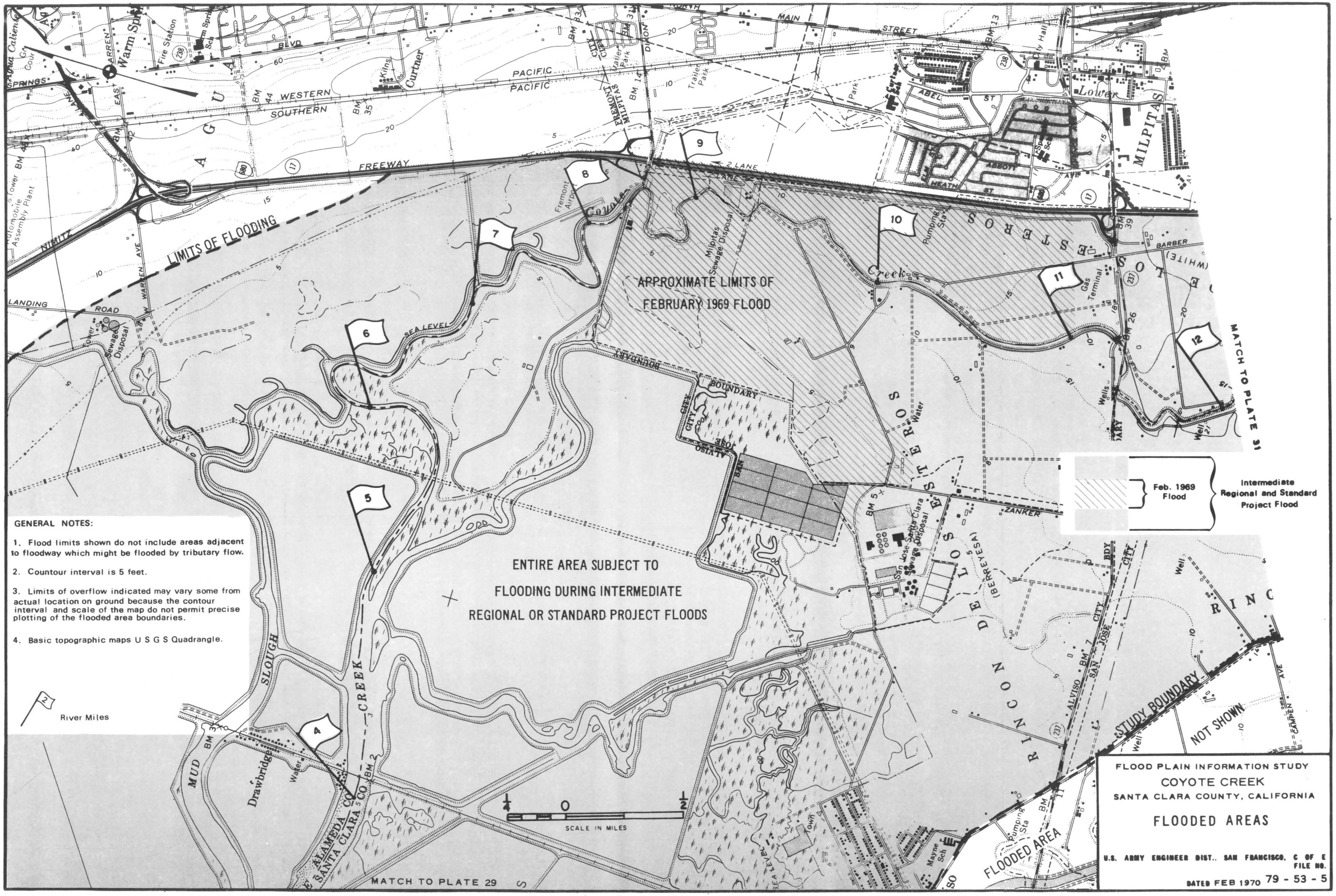
FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
DATED FEB 1970 79 - 53 - 5



GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.

2. Countour interval is 5 feet.

3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.

4. Basic topographic maps U S G S Quadrangle.

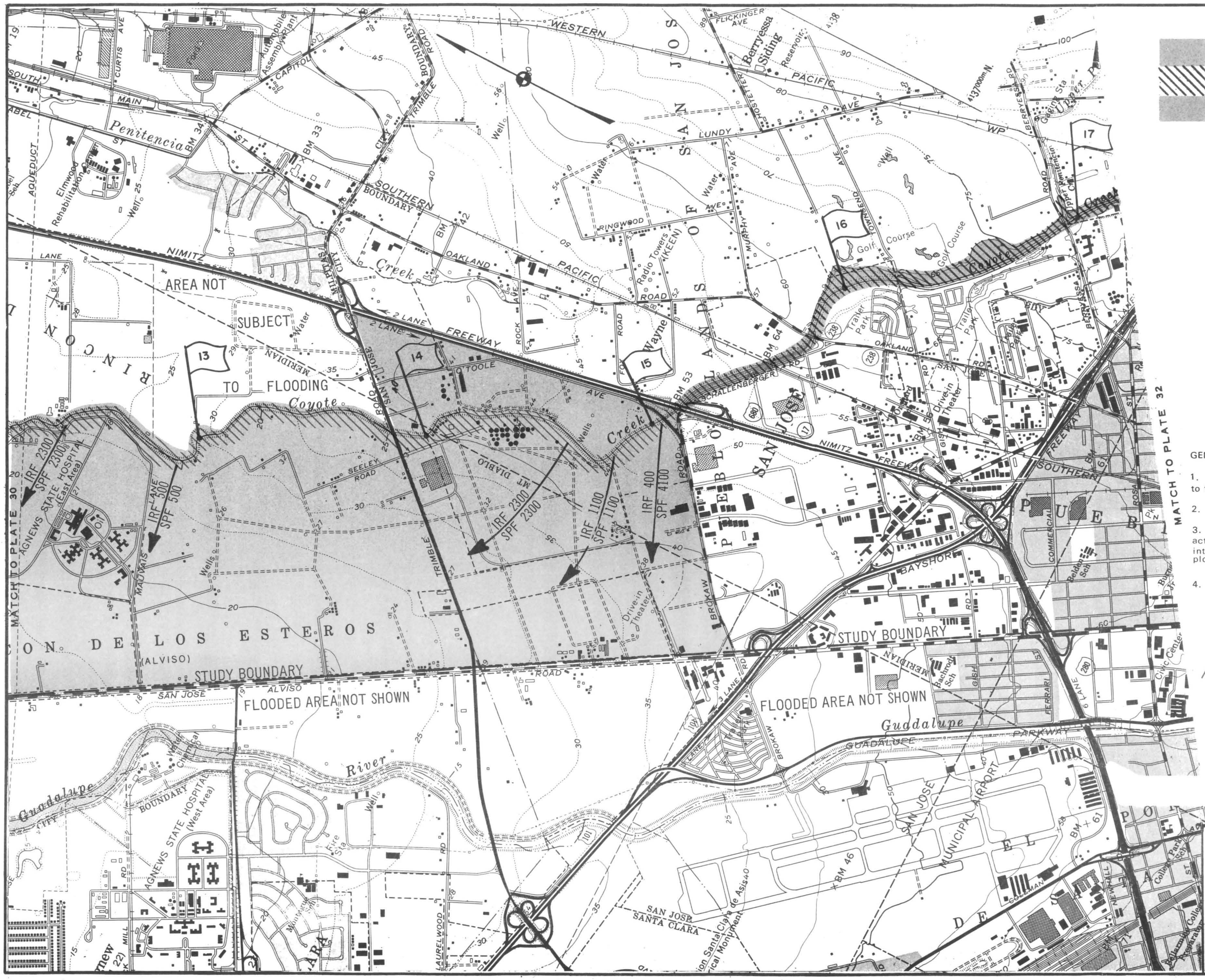
2 River Miles

▨	Feb. 1969 Flood	Intermediate Regional and Standard Project Flood

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
DATED FEB 1970 79 - 53 - 5



▨	Feb. 1969 Flood	Intermediate Regional and Standard Project Flood

IRF 6600
SPF 6600
Peak reduction in select flood discharge in cubic feet per second

River Miles

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Countour interval is 5 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps U S G S Quadrangle.

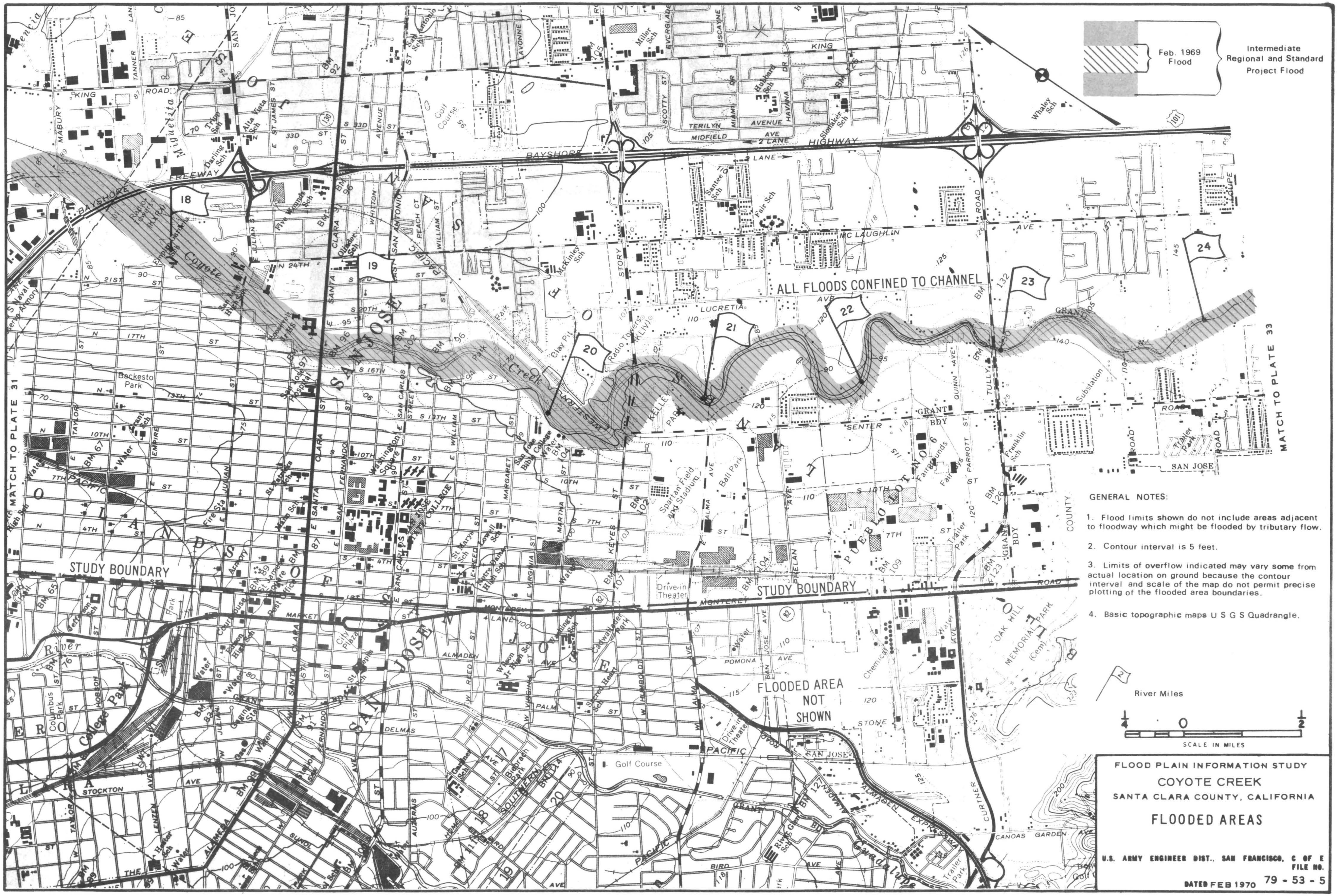
¼ 0 ½
SCALE IN MILES

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
DATED FEB 1970 79 - 53 - 5

PLATE 31



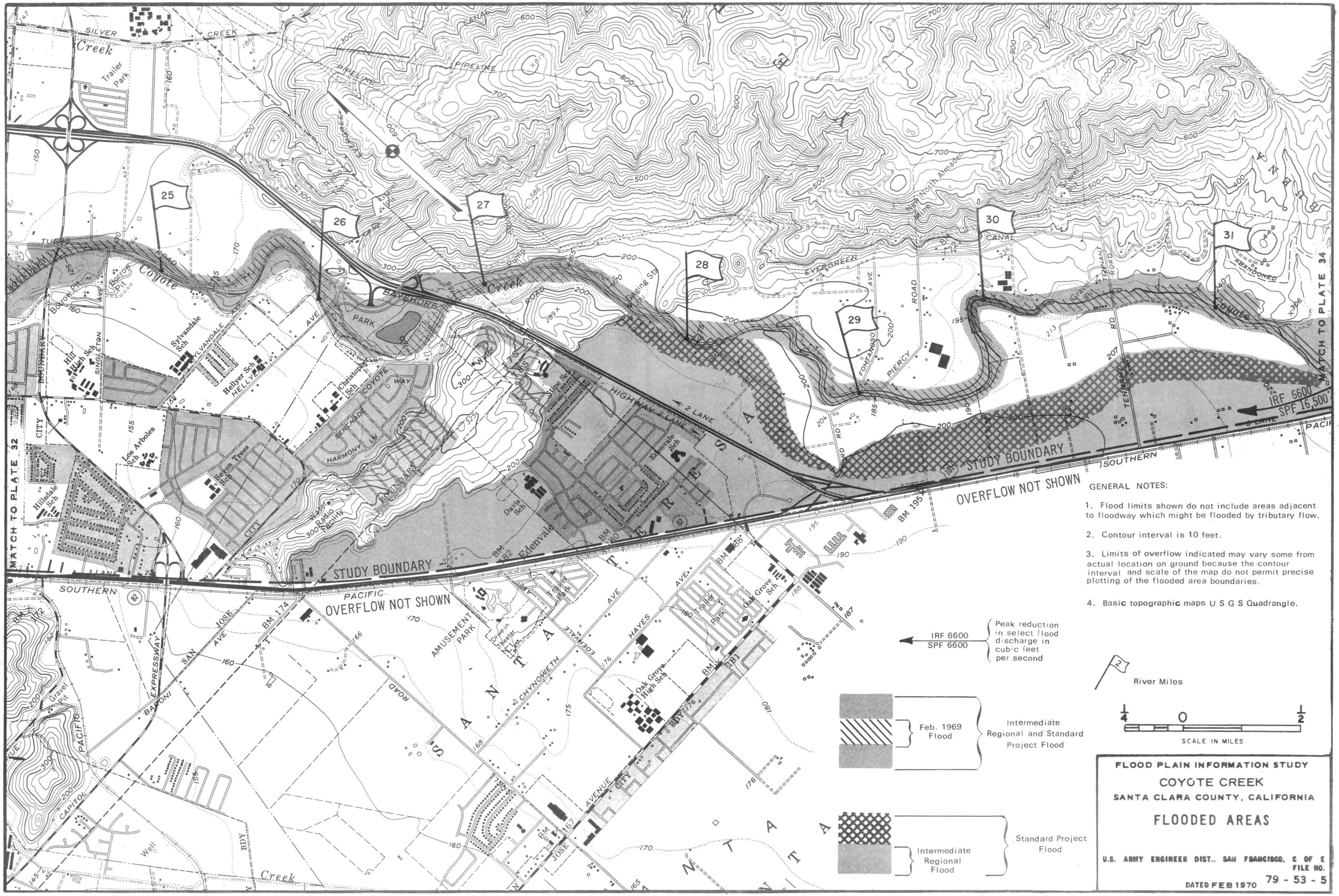
GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 5 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.
4. Basic topographic maps U S G S Quadrangle.

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
DATED FEB 1970 79 - 53 - 5



GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.

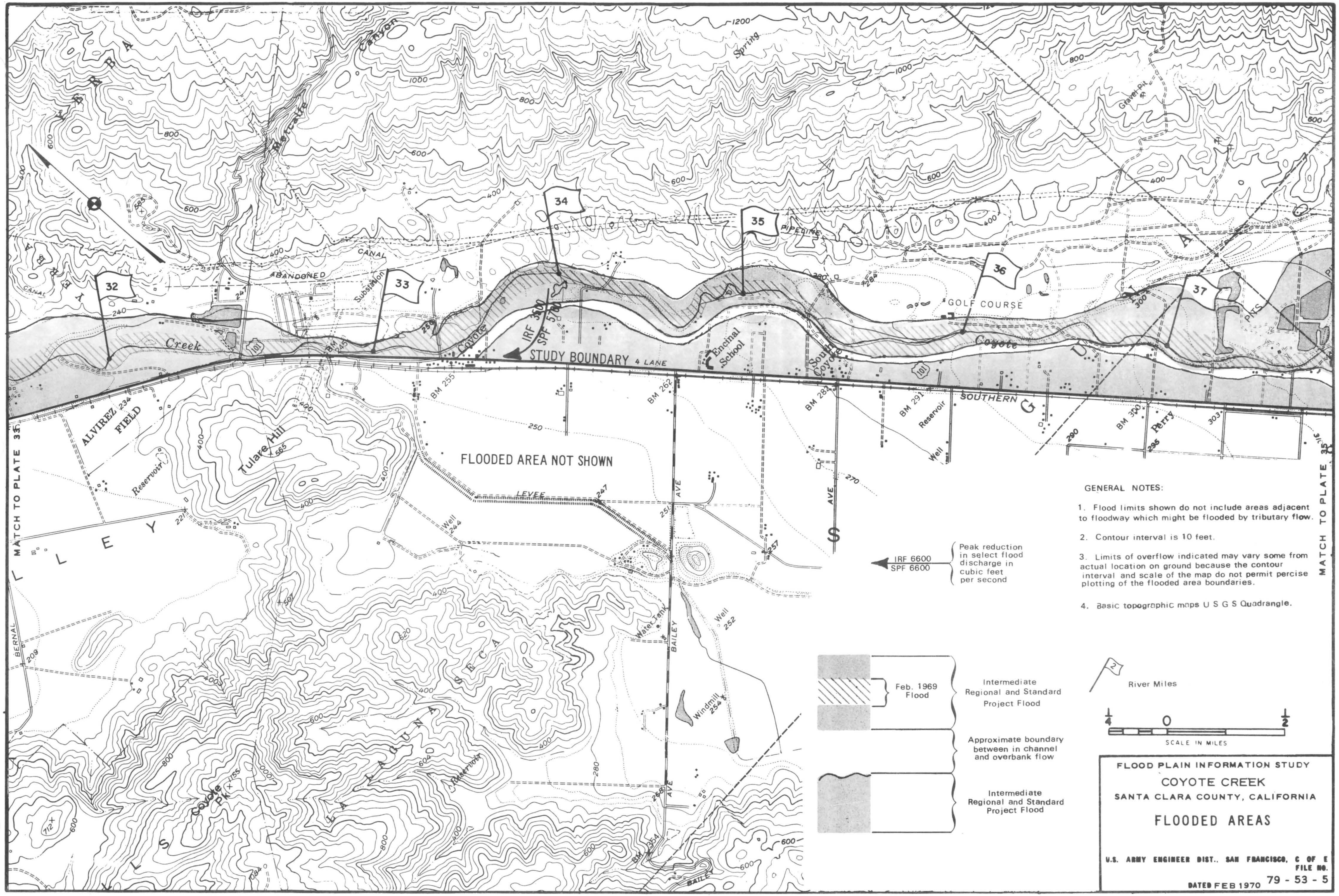
2. Contour interval is 10 feet.

3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundaries.

4. Basic topographic maps U S G S Quadrangle.

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA
FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
DATED FEB 1970 79 - 53 - 5



GENERAL NOTES:

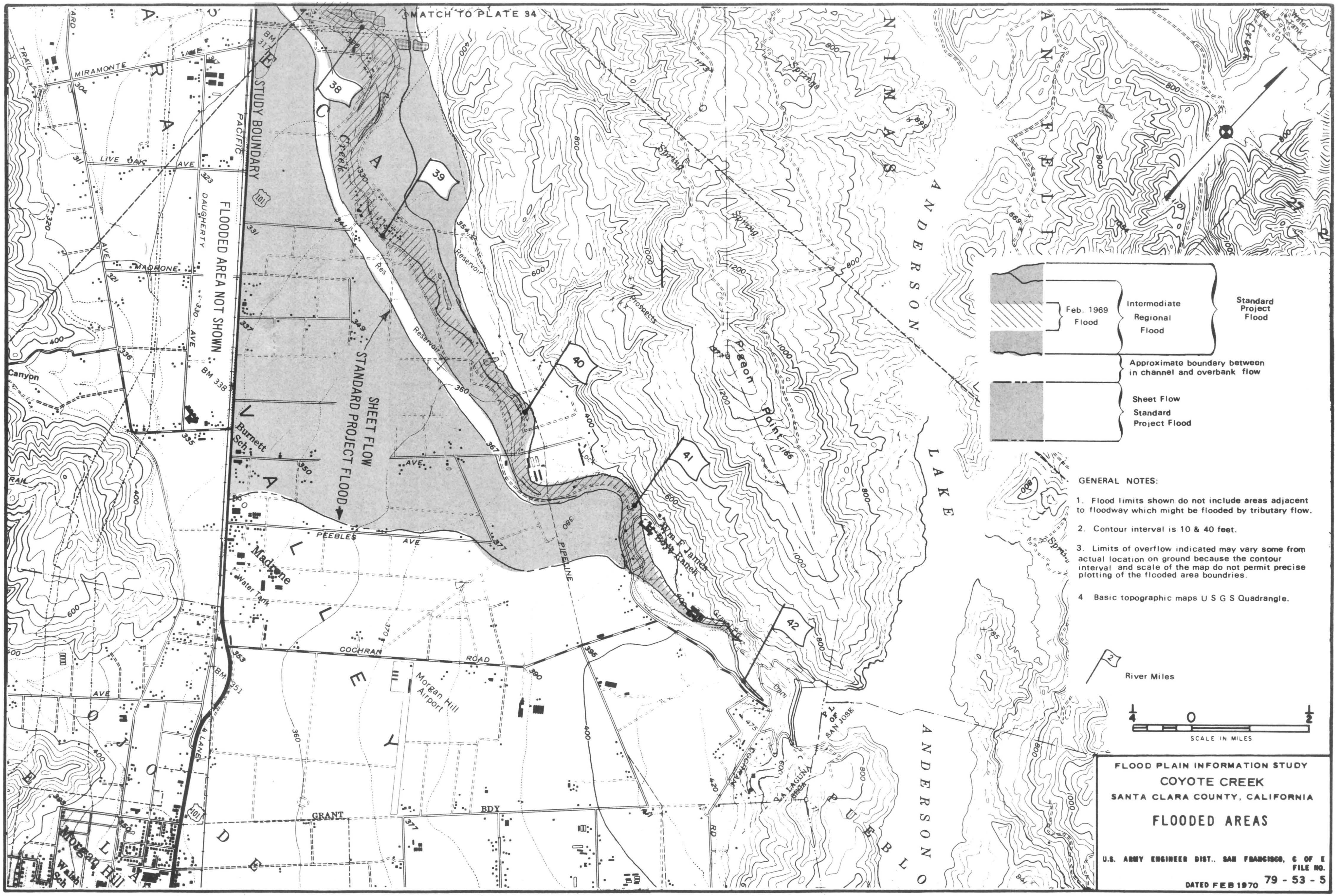
1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.
2. Contour interval is 10 feet.
3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit percise plotting of the flooded area boundaries.
4. Basic topographic maps U S G S Quadrangle.

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO.
79 - 53 - 5
DATED FEB 1970

PLATE 34



Feb. 1969 Flood

Intermodiate Regional Flood

Standard Project Flood

Approximate boundary between in channel and overbank flow

Sheet Flow Standard Project Flood

GENERAL NOTES:

1. Flood limits shown do not include areas adjacent to floodway which might be flooded by tributary flow.

2. Contour interval is 10 & 40 feet.

3. Limits of overflow indicated may vary some from actual location on ground because the contour interval and scale of the map do not permit precise plotting of the flooded area boundries.

4. Basic topographic maps U S G S Quadrangle.

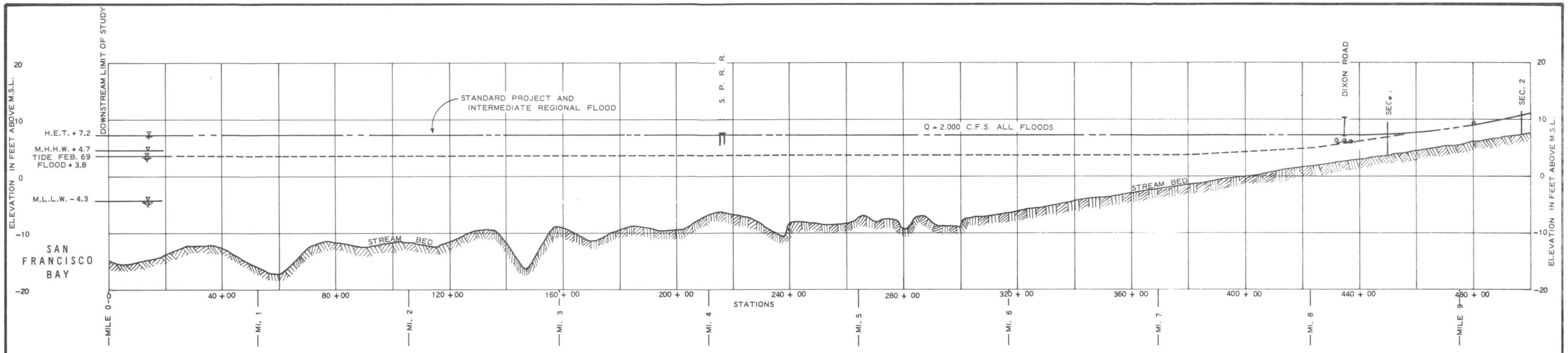
River Miles

SCALE IN MILES

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

FLOODED AREAS

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
FILE NO. 79 - 53 - 5
DATED FEB 1970

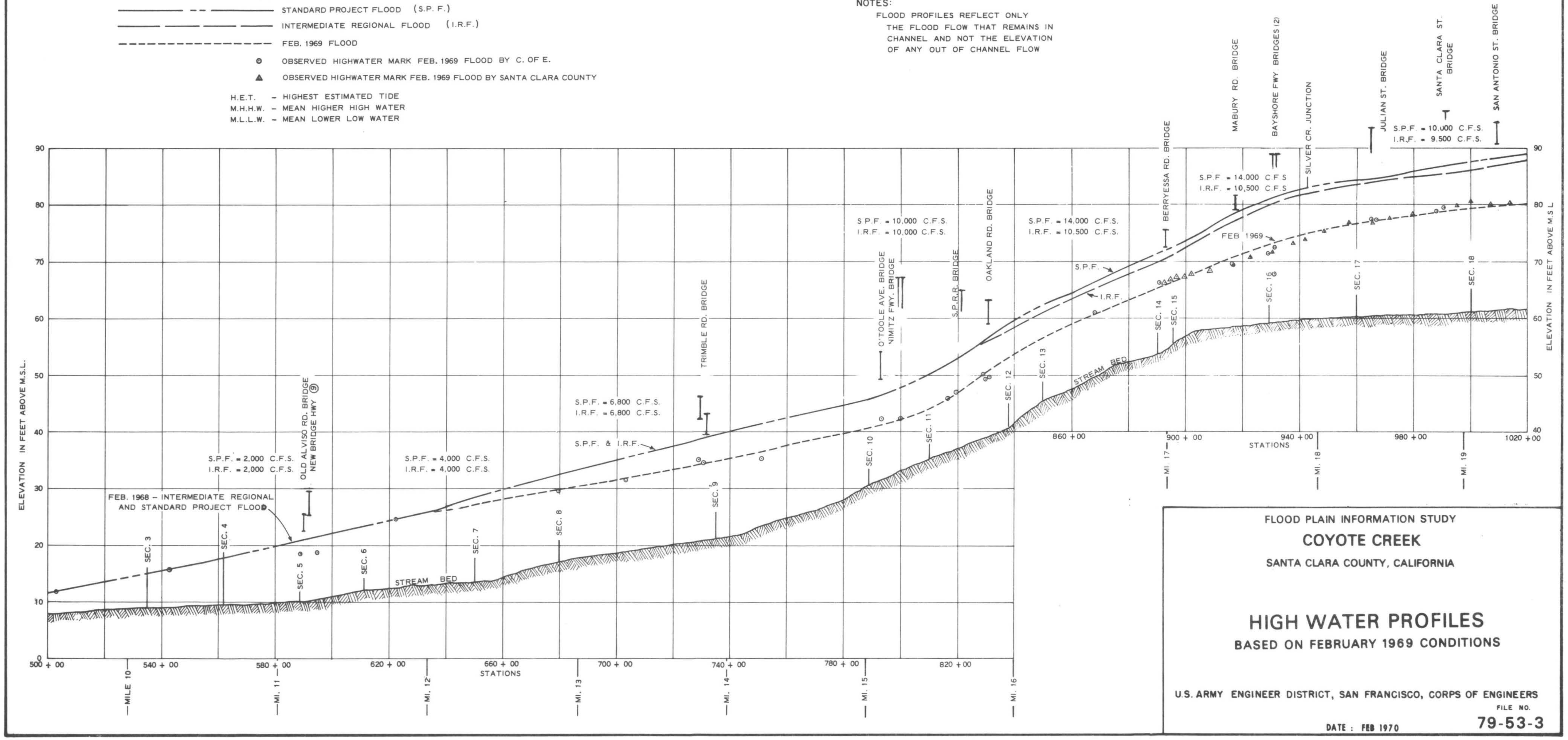


LEGEND

——— - - ———	STANDARD PROJECT FLOOD (S.P. F.)
——— ——— ———	INTERMEDIATE REGIONAL FLOOD (I.R.F.)
- - - - - - - -	FEB. 1969 FLOOD
⊙	OBSERVED HIGHWATER MARK FEB. 1969 FLOOD BY C. OF E.
▲	OBSERVED HIGHWATER MARK FEB. 1969 FLOOD BY SANTA CLARA COUNTY

H.E.T. - HIGHEST ESTIMATED TIDE
M.H.H.W. - MEAN HIGHER HIGH WATER
M.L.L.W. - MEAN LOWER LOW WATER

NOTES:
FLOOD PROFILES REFLECT ONLY THE FLOOD FLOW THAT REMAINS IN CHANNEL AND NOT THE ELEVATION OF ANY OUT OF CHANNEL FLOW



FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

HIGH WATER PROFILES

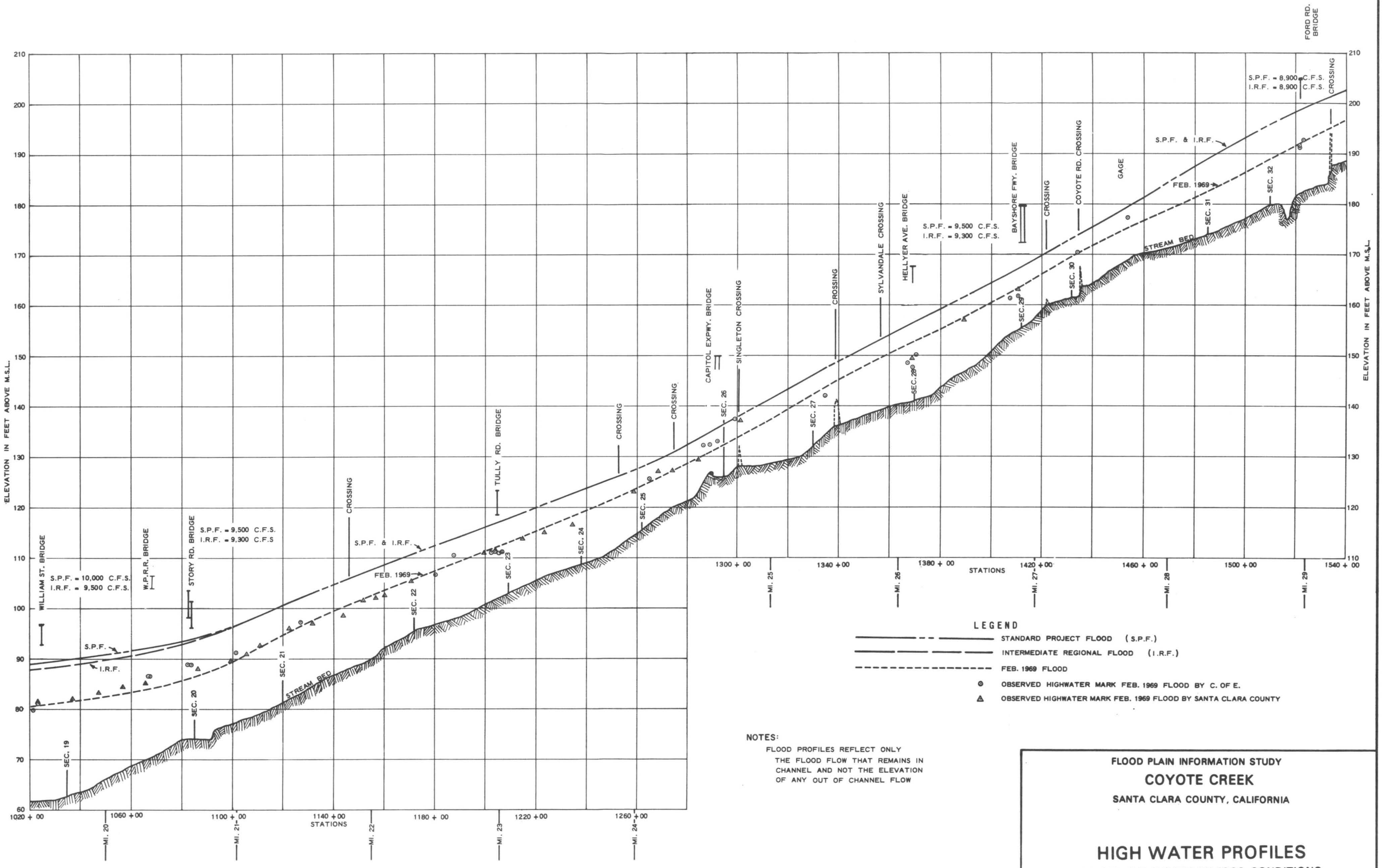
BASED ON FEBRUARY 1969 CONDITIONS

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

FILE NO.
79-53-3

DATE : FEB 1970

PLATE 36



NOTES:

FLOOD PROFILES REFLECT ONLY THE FLOOD FLOW THAT REMAINS IN CHANNEL AND NOT THE ELEVATION OF ANY OUT OF CHANNEL FLOW

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

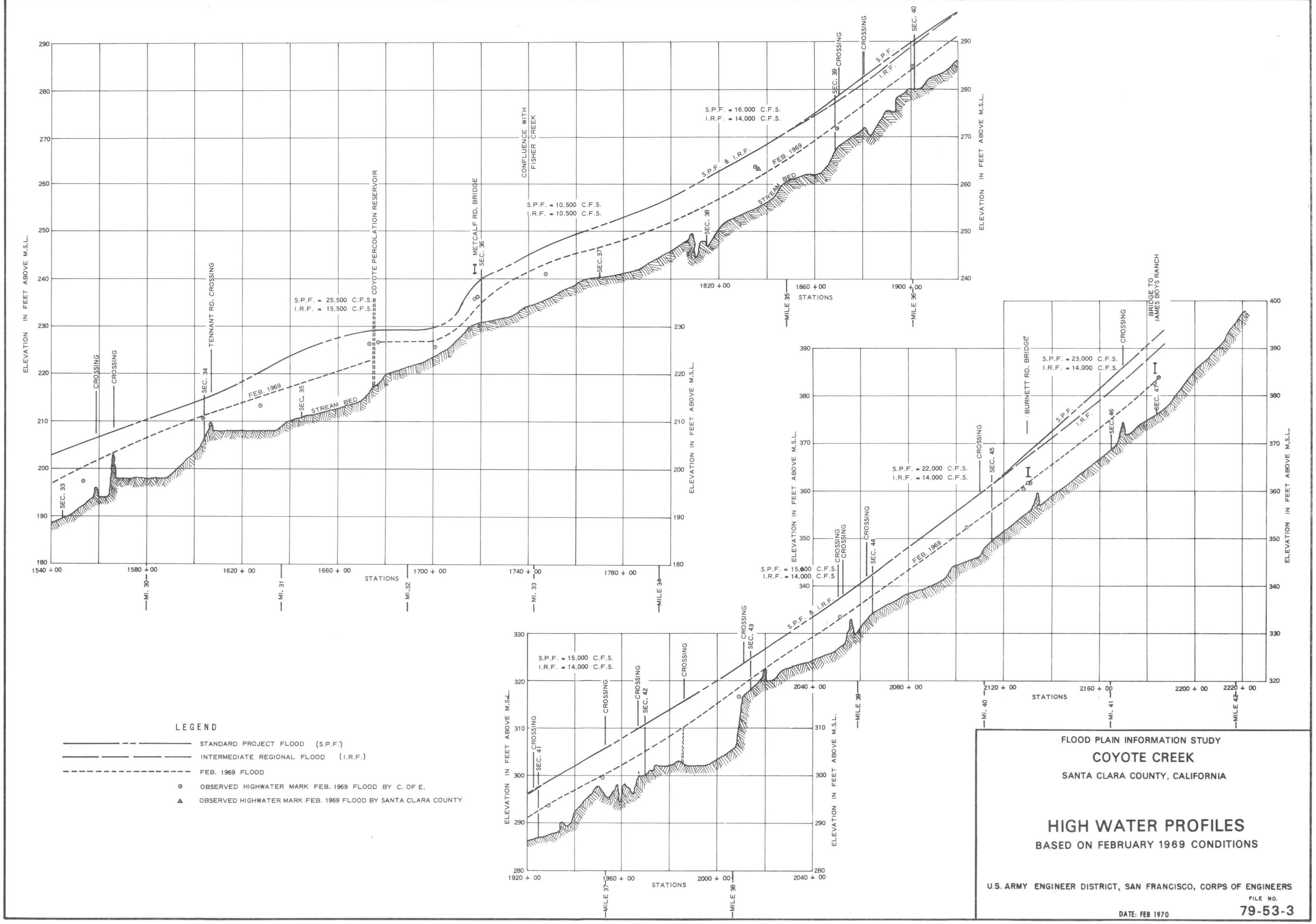
HIGH WATER PROFILES

BASED ON FEBRUARY 1969 CONDITIONS

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

FILE NO.
79-53-3

DATE: FEB 1970



FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

SANTA CLARA COUNTY, CALIFORNIA

HIGH WATER PROFILES

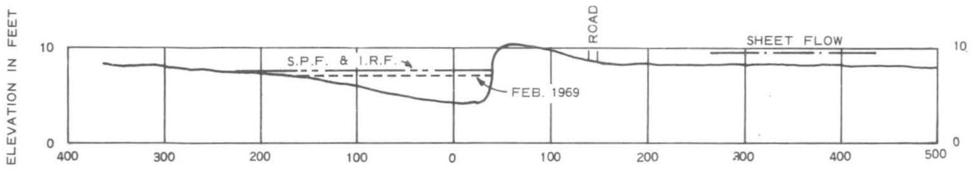
BASED ON FEBRUARY 1969 CONDITIONS

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

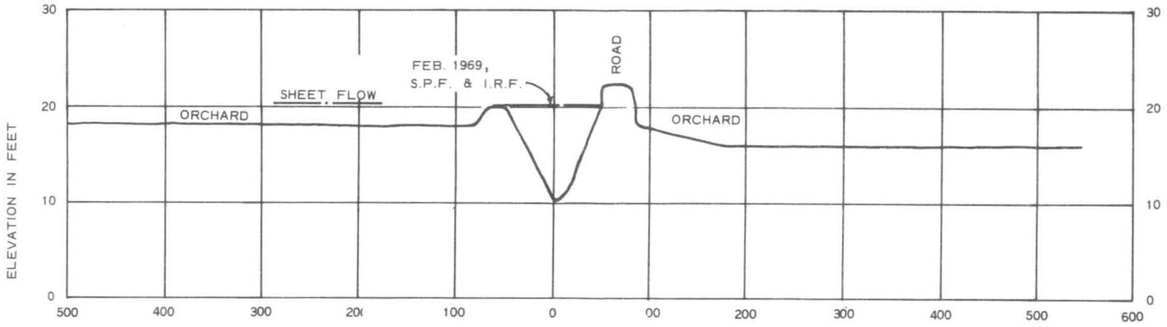
FILE NO.

79-53-3

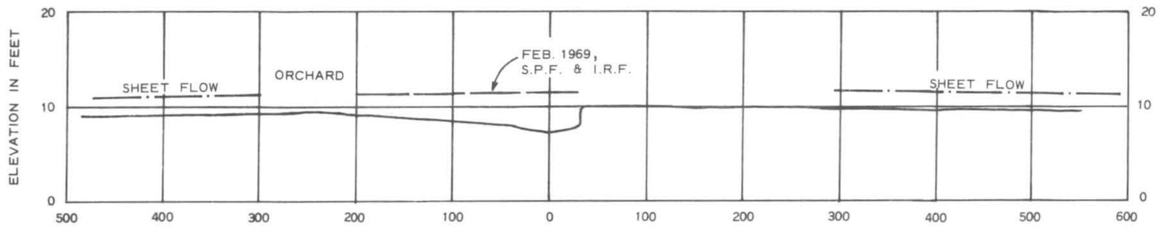
DATE: FEB 1970



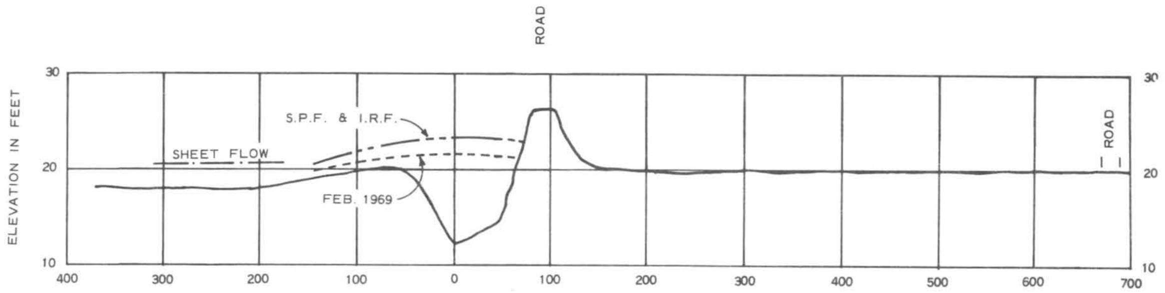
SECTION 1 @ STA. 450+00
R.M. 8.5



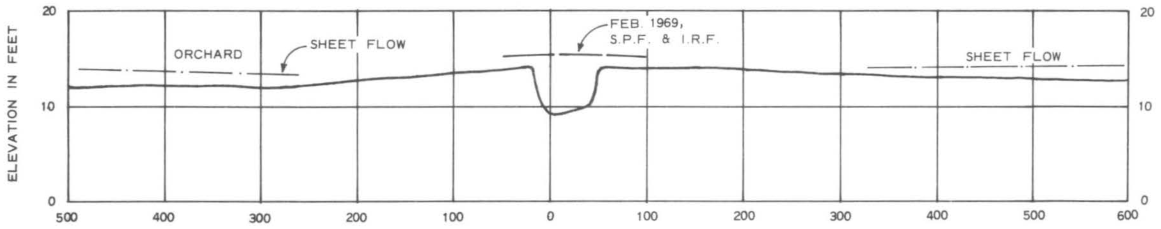
SECTION 5 @ STA. 589+00
R.M. 11.2



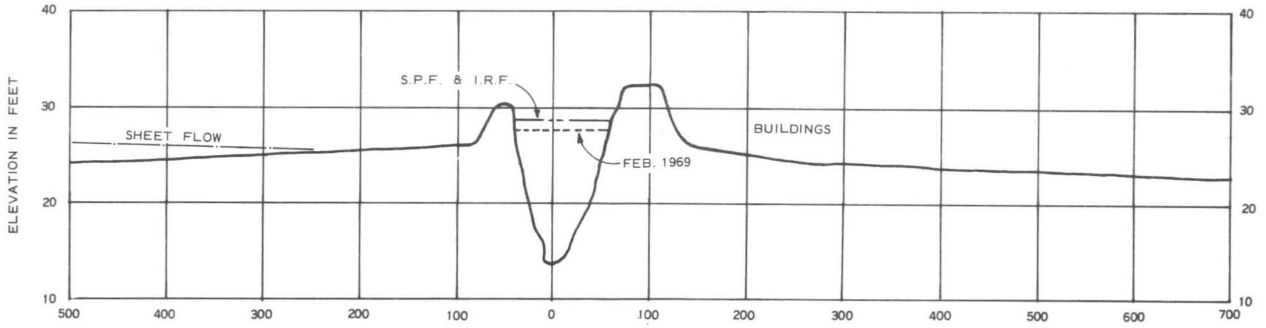
SECTION 2 @ STA. 497+00
R.M. 9.4



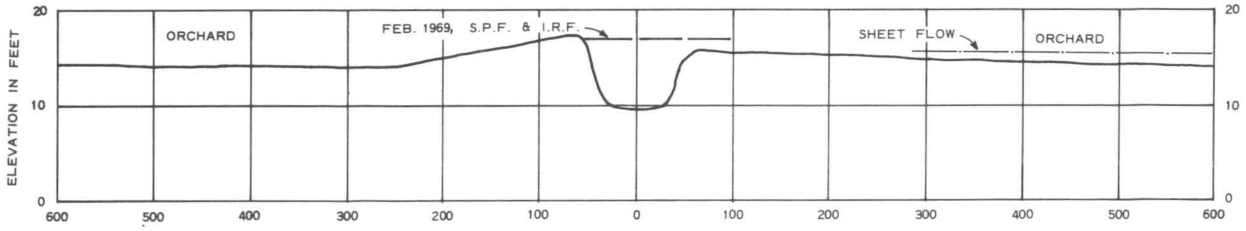
SECTION 6 @ STA. 611+50
R.M. 11.6



SECTION 3 @ STA. 535+00
R.M. 10.1



SECTION 7 @ STA. 650+00
R.M. 12.3



SECTION 4 @ STA. 562+00
R.M. 10.6

NOTES:
ALL CROSS SECTIONS ARE SHOWN LOOKING DOWNSTREAM
ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL DATUM

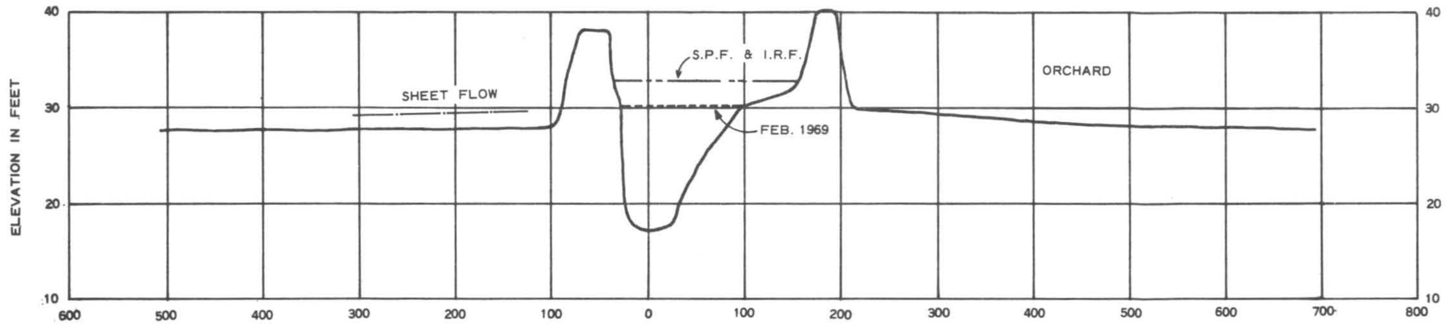
LEGEND

—— - - —— - -	S.P.F.
— — — —	I.R.F.
- - - - - - - -	1969 FLOOD
——·——·——	SHEET FLOW

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

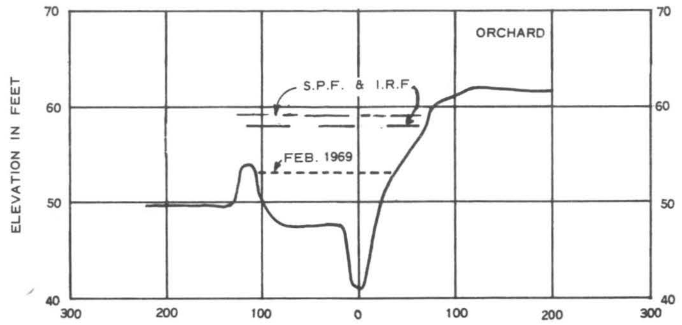
COYOTE CREEK
CROSS SECTIONS

US ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FEB. 1970
FILE NO.
79-3-3



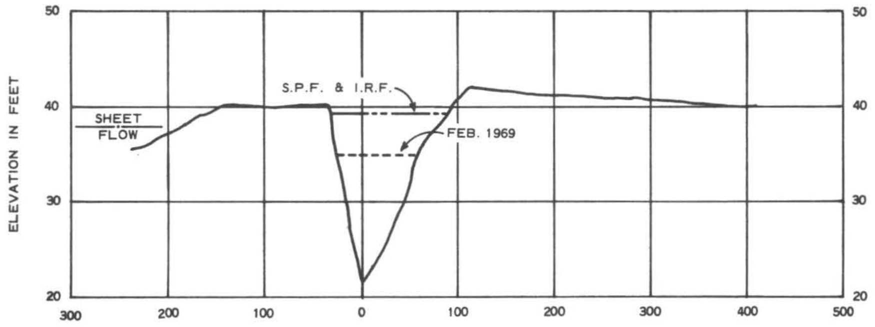
SECTION 8 @ STA. 680+00

R.M. 12.9



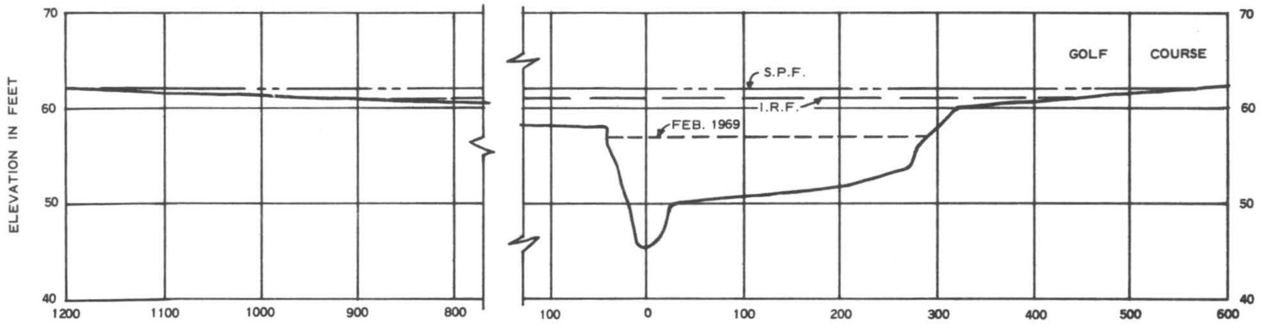
SECTION 12 @ STA. 838+00

R.M. 15.9



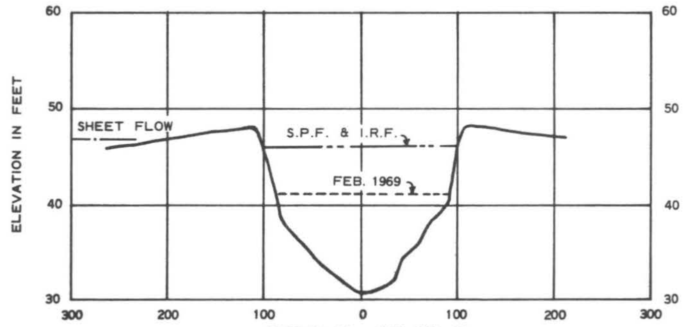
SECTION 9 @ STA. 735+00

R.M. 13.9



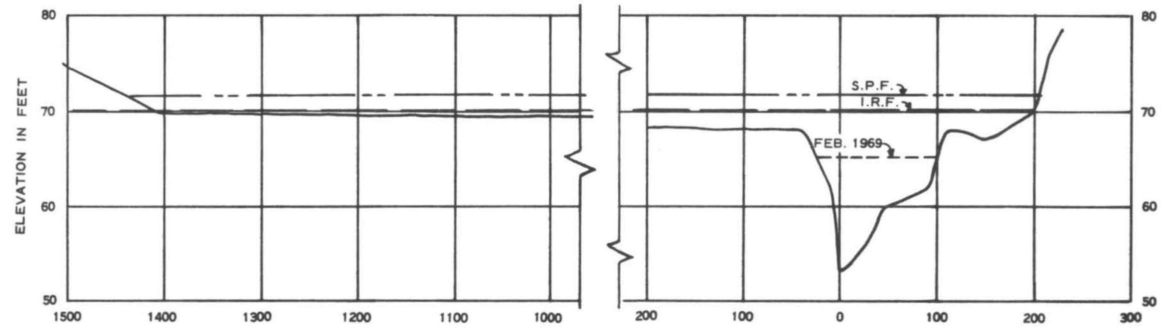
SECTION 13 @ STA. 850+00

R.M. 16.1



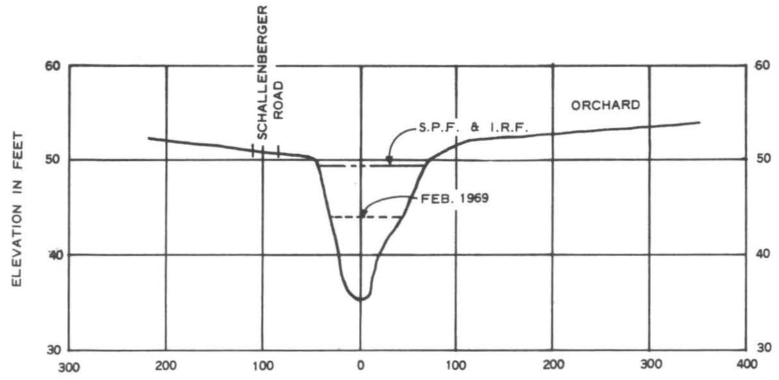
SECTION 10 @ STA. 789+00

R.M. 15.0



SECTION 14 @ STA. 890+50

R.M. 16.9



SECTION 11 @ STA. 810+00

R.M. 15.3

NOTES:

ALL CROSS SECTIONS ARE SHOWN LOOKING DOWN STREAM

ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL DATUM

LEGEND

—·—·—·—	S.P.F.
— — — —	I.R.F.
- - - - - - -	1969 FLOOD
—·——·——·—	SHEET FLOW

FLOOD PLAIN INFORMATION STUDY

COYOTE CREEK

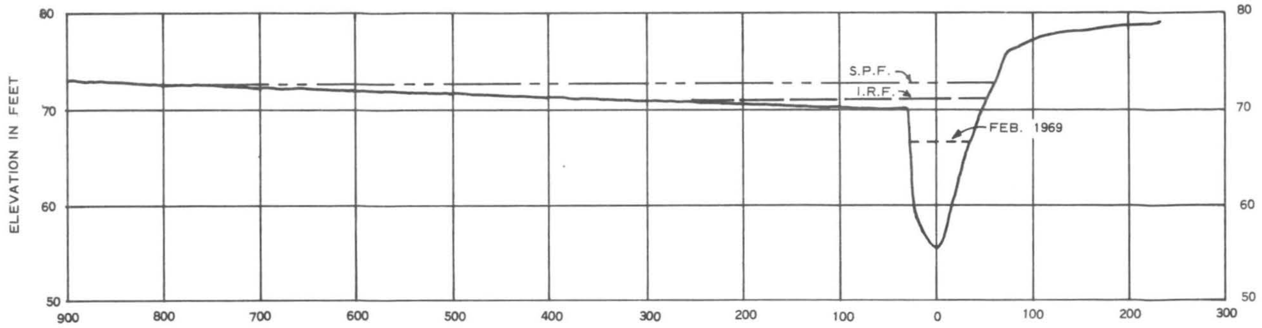
SANTA CLARA COUNTY, CALIFORNIA

COYOTE CREEK
CROSS SECTIONS

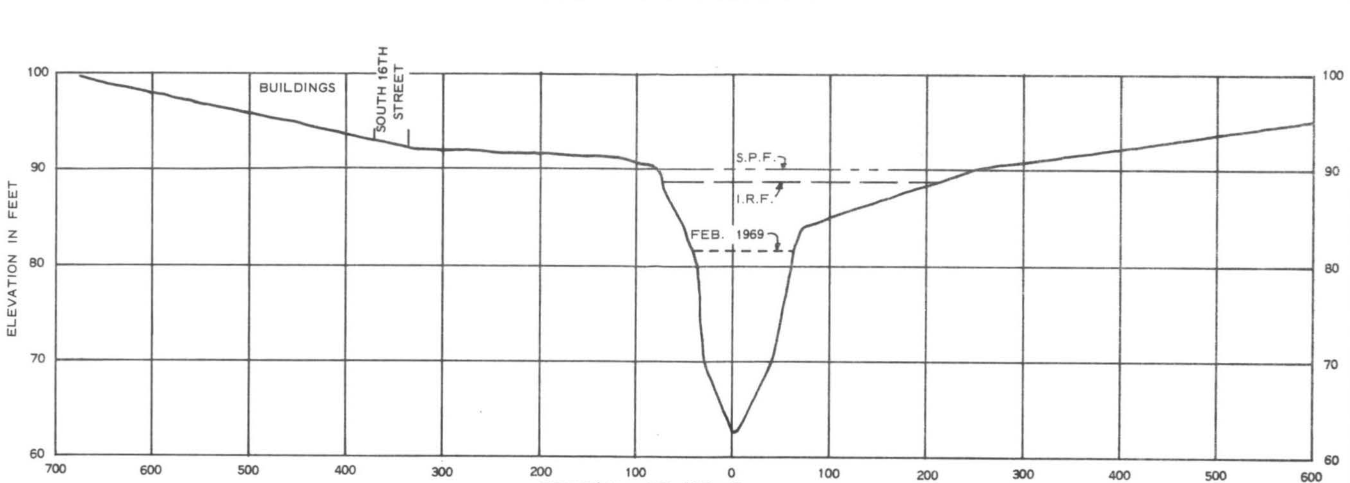
US ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS

DATE FEB. 1970

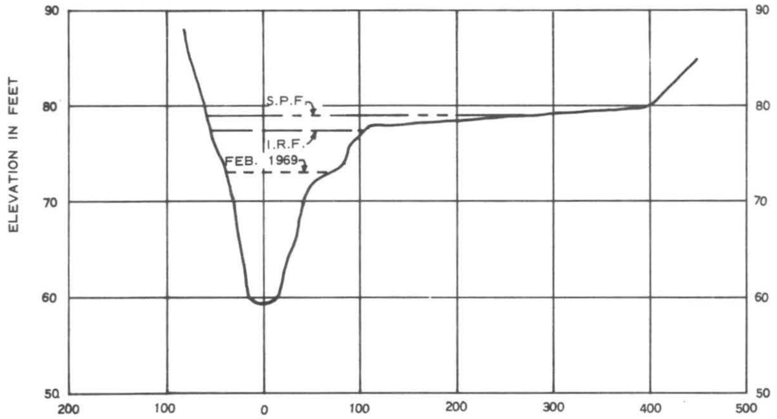
FILE NO. 79-3-3



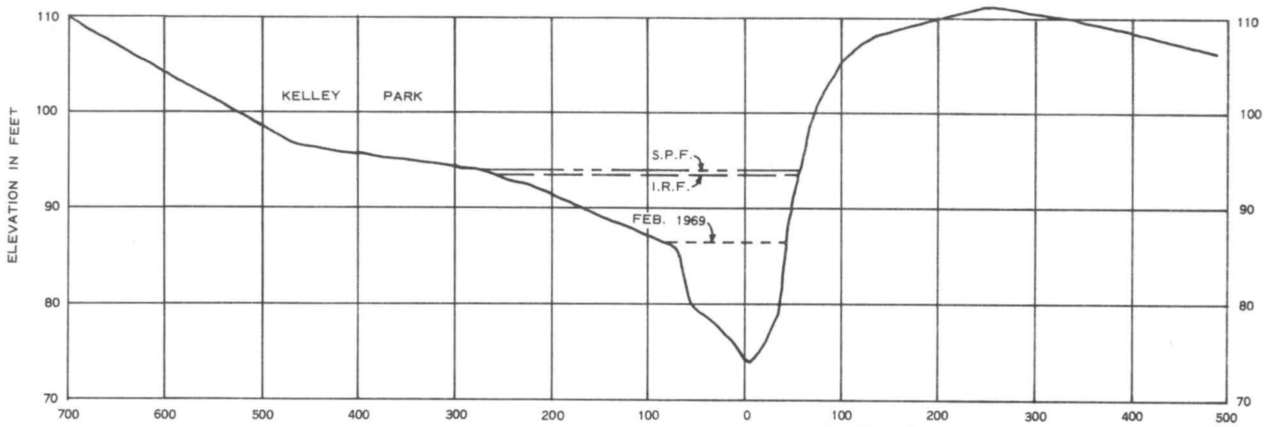
SECTION 15 @ STA. 895+90
R.M. 17.0



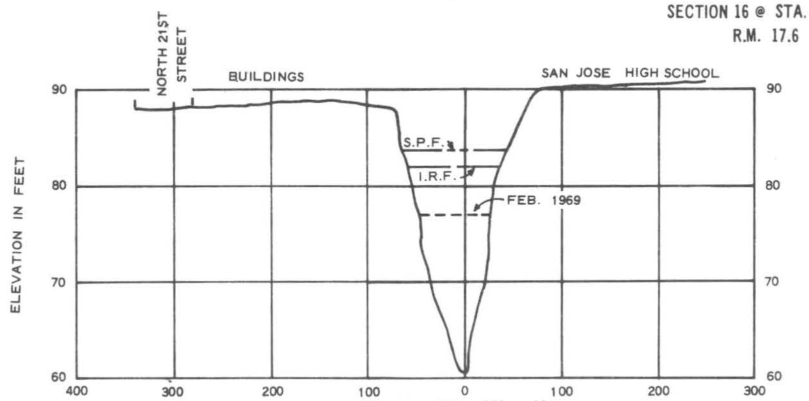
SECTION 19 @ STA. 1035+00
R.M. 19.6



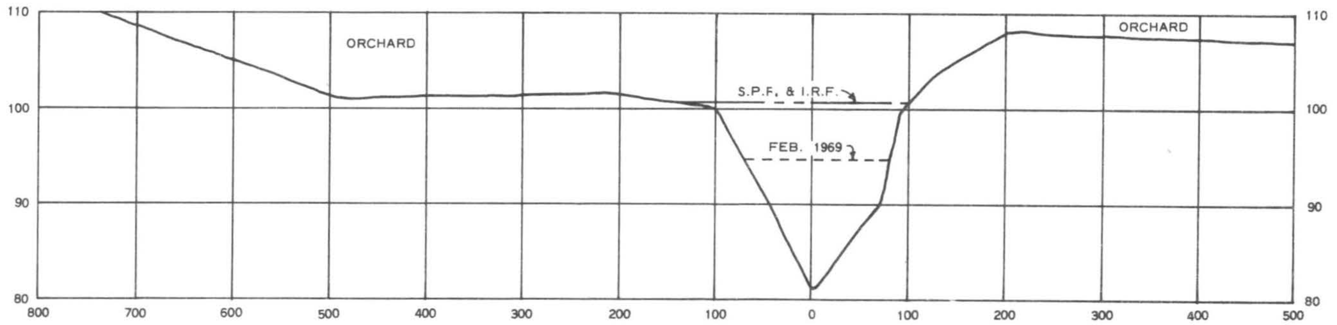
SECTION 16 @ STA. 929+00
R.M. 17.6



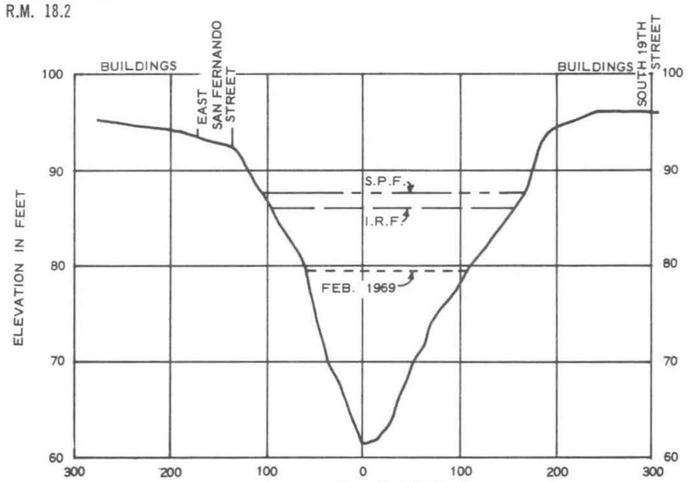
SECTION 20 @ STA. 1085+00
R.M. 20.6



SECTION 17 @ STA. 960 + 00
R.M. 18.2



SECTION 21 @ STA. 1120+00
R.M. 21.2



SECTION 18 @ STA. 1000+00
R.M. 18.9

NOTES:
ALL CROSS SECTIONS ARE SHOWN LOOKING DOWNSTREAM
ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL DATUM

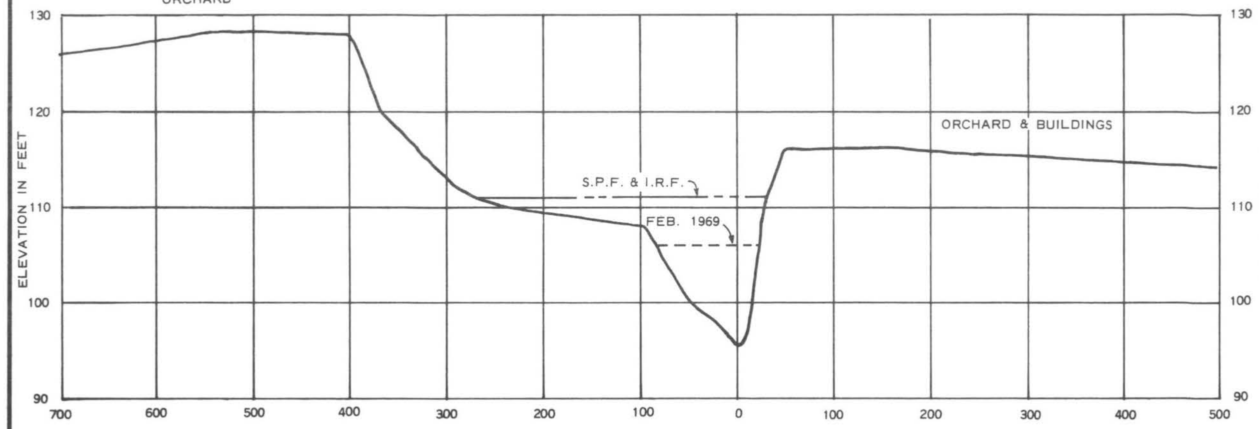
LEGEND

— · — · — S.P.F.
— — — — I.R.F.
- - - - - - 1969 FLOOD

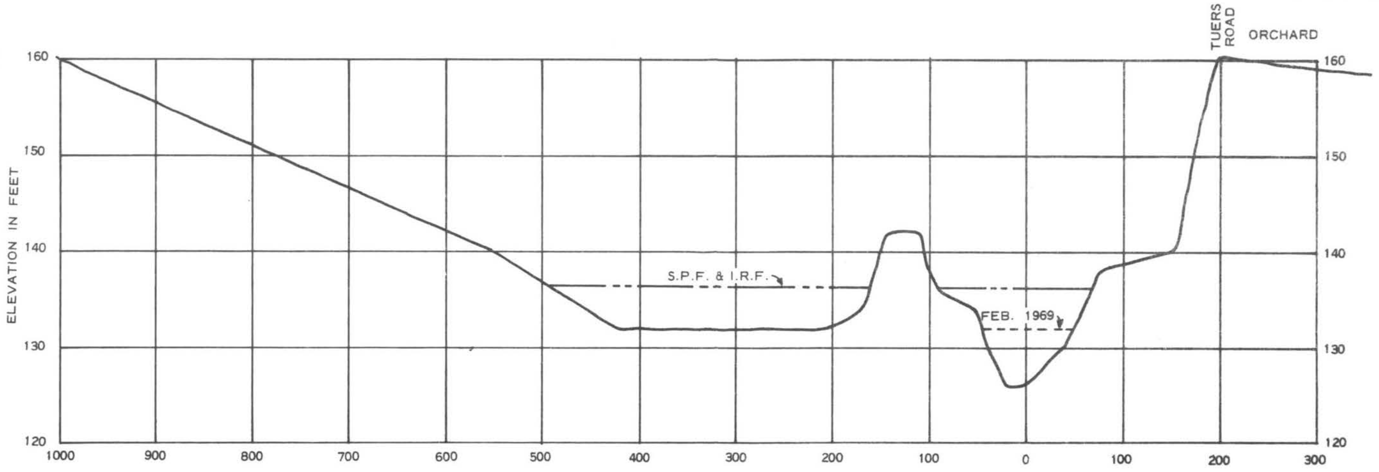
FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

COYOTE CREEK
CROSS SECTIONS

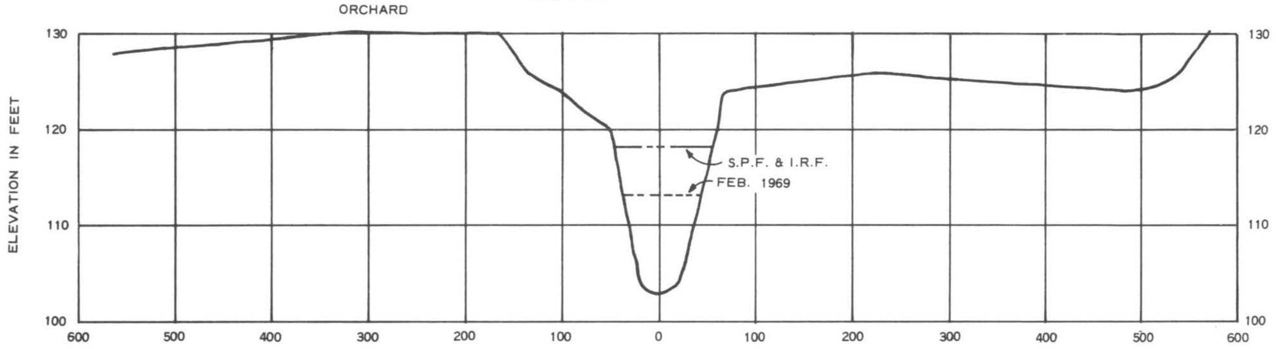
U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
DATE FEB. 1970
FILE NO. 79-3-3



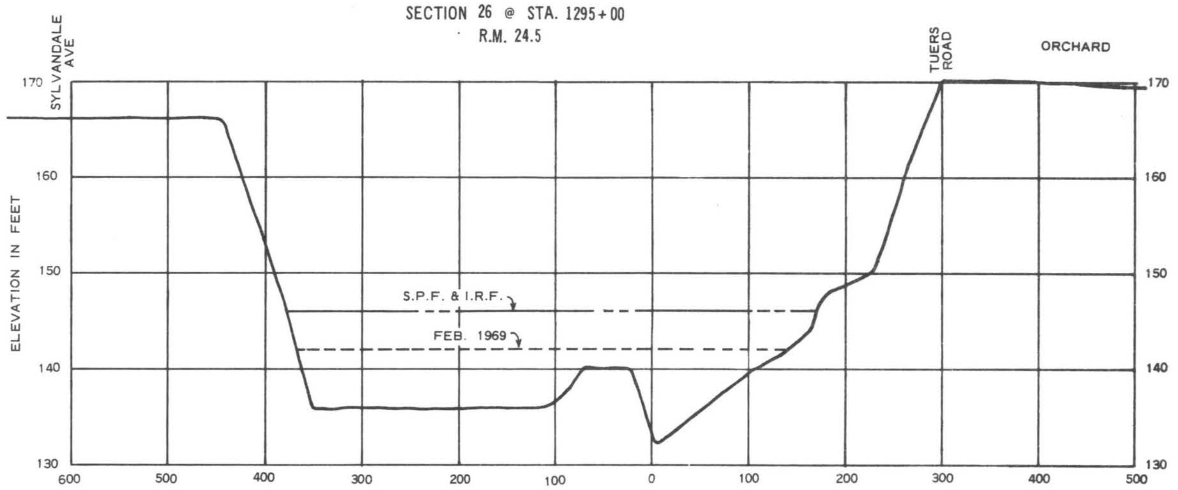
SECTION 22 @ STA. 1172+00
R.M. 22.2



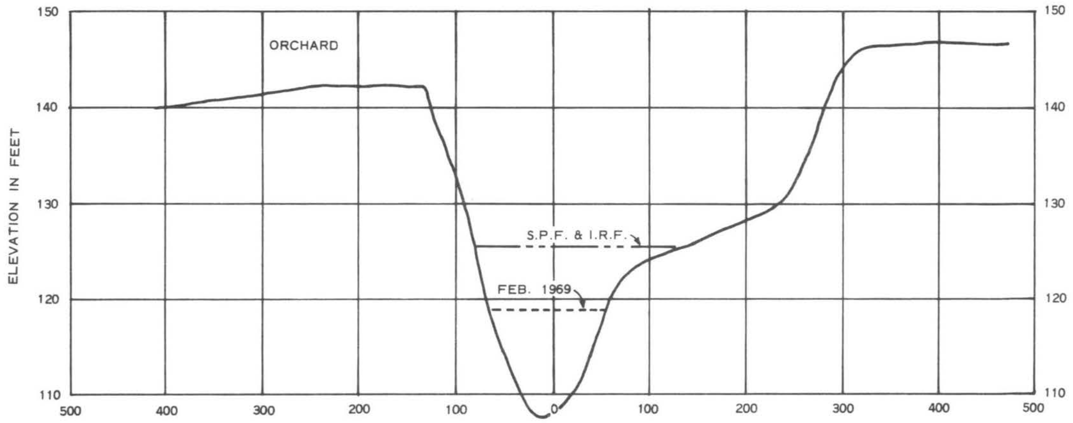
SECTION 26 @ STA. 1295+00
R.M. 24.5



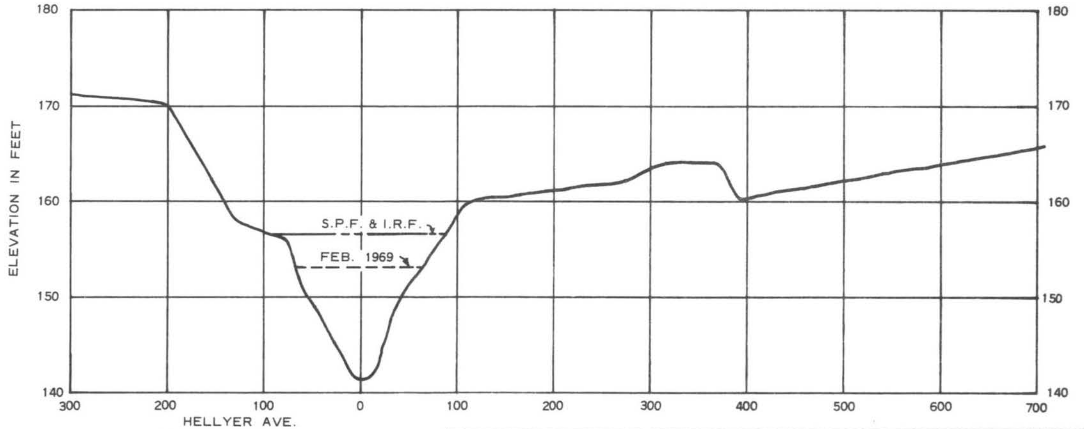
SECTION 23 @ STA. 1209+00 TULLY ROAD
R.M. 22.9



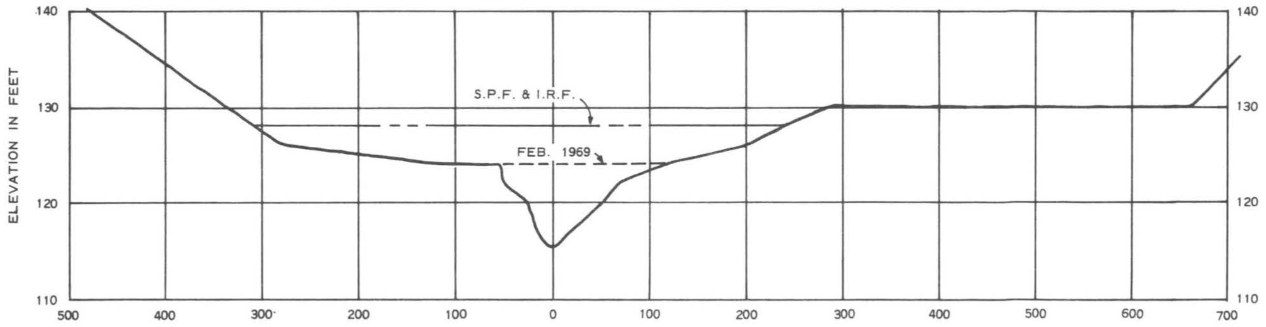
SECTION 27 @ STA 1330+00
R.M. 25.2



SECTION 24 @ STA. 1238+00
R.M. 23.4



SECTION 28 @ STA. 1370+00
R.M. 26.0



SECTION 25 @ STA. 1262+00
R.M. 23.9

NOTES:

ALL CROSS SECTIONS ARE SHOWN LOOKING DOWNSTREAM

ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL DATUM

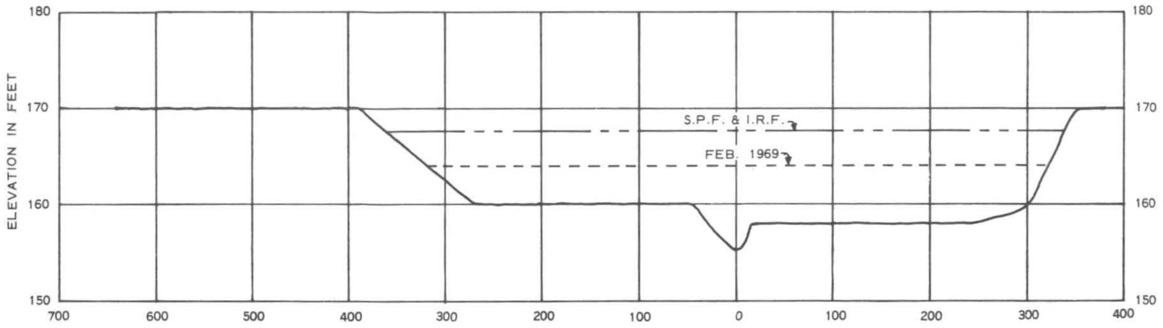
LEGEND

— · — · — S.P.F.
——— ——— I.R.F.
– – – – – – 1969 FLOOD

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

COYOTE CREEK
CROSS SECTIONS

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE FEB. 1970 79-3-3



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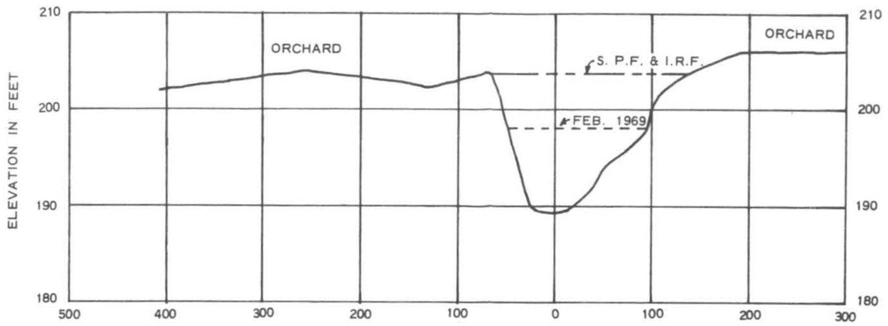

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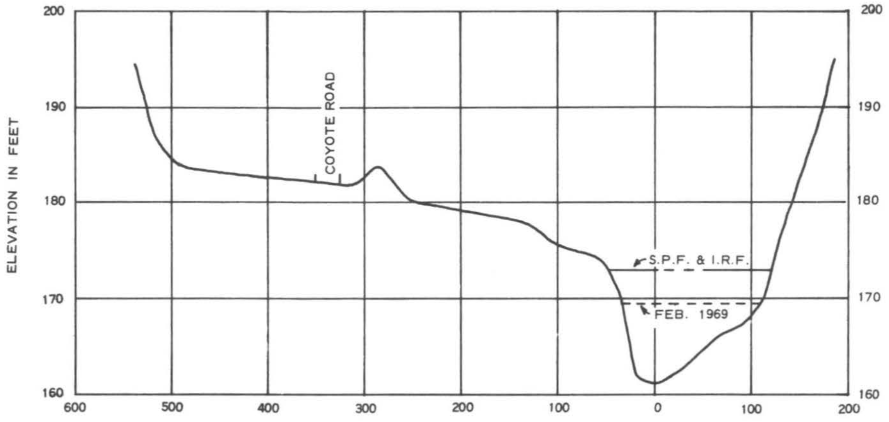
R.M. 29.3



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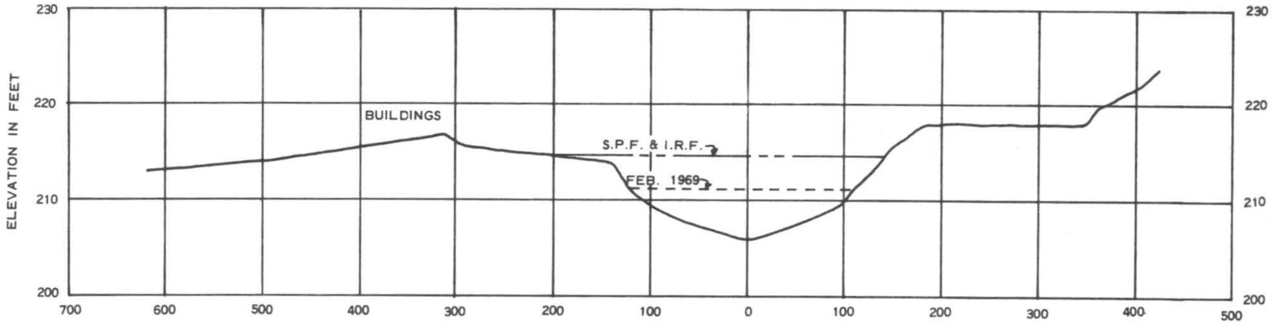
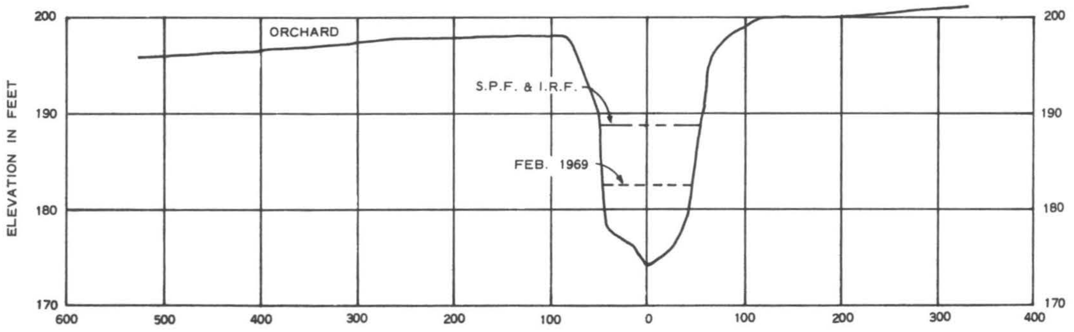


SECTION 34 @ STA. 1604+00
R.M. 30.4



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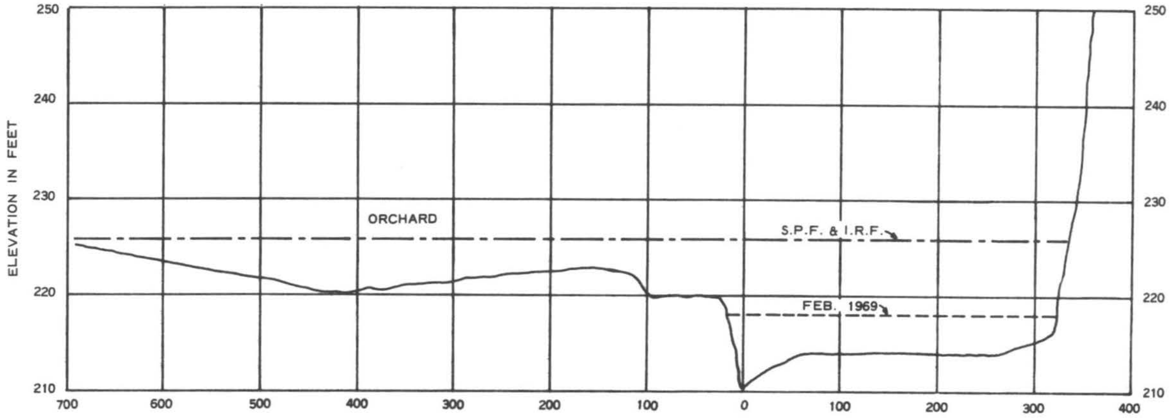

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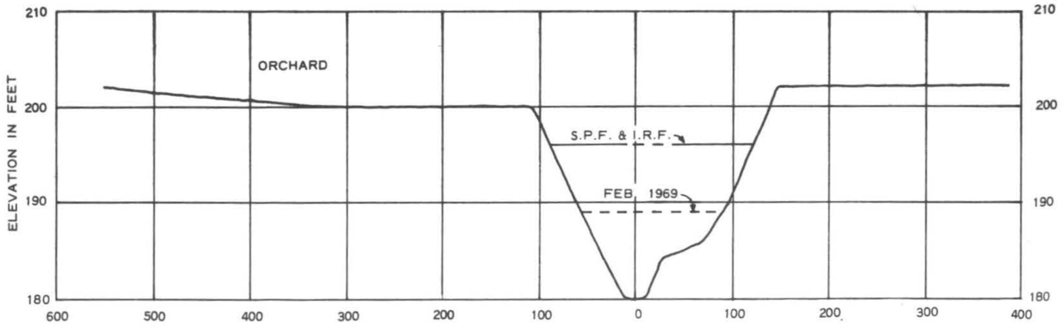


SECTION 32 @ STA. 1510+00
R.M. 28.6

NOTES:
ALL CROSS SECTIONS ARE SHOWN LOOKING DOWNSTREAM
ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL DATUM

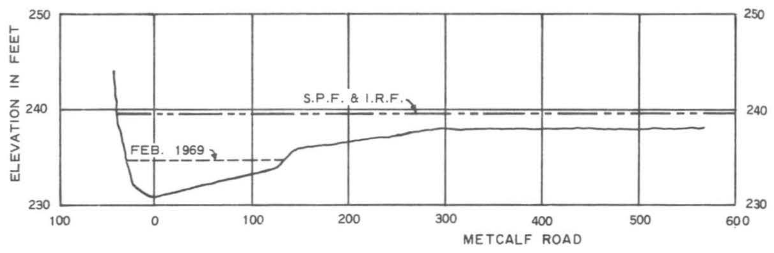
LEGEND

—·—·—·— S.P.F.
— — — — I.R.F.
- - - - - - 1969 FLOOD

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

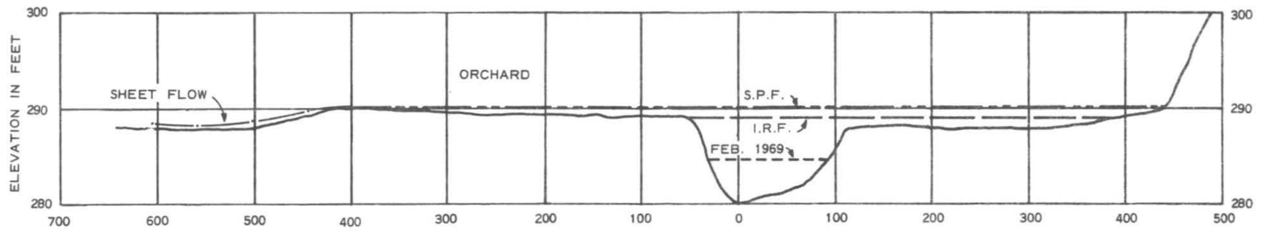
COYOTE CREEK
CROSS SECTIONS

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE FEB. 1970 79-3-3



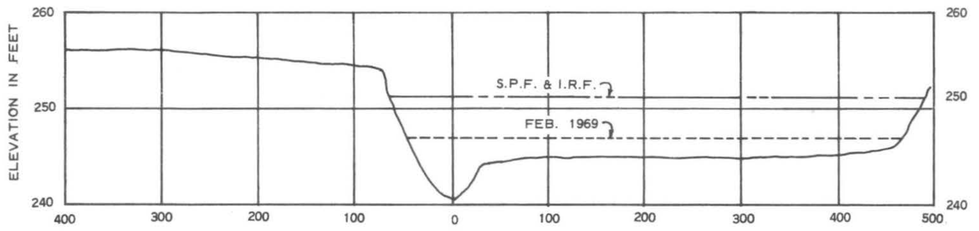
SECTION 36 @ STA. 1720+00

R.M. 32.6



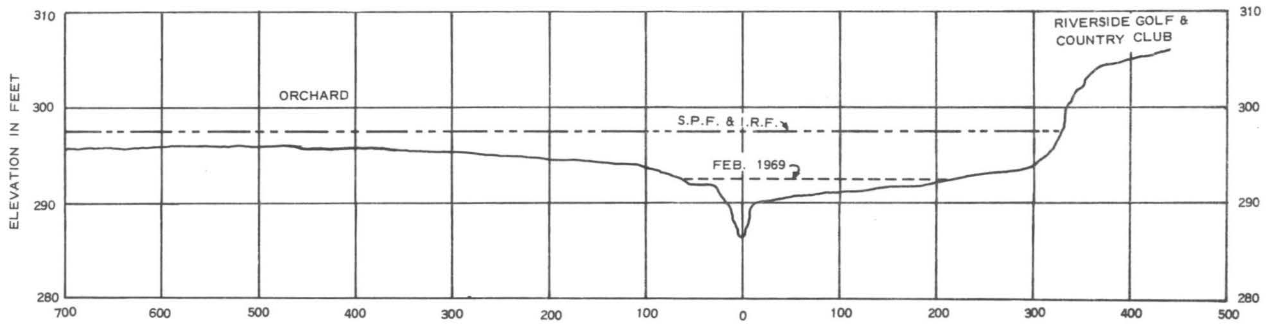
SECTION 40 @ STA. 1902+00

R.M. 36.0



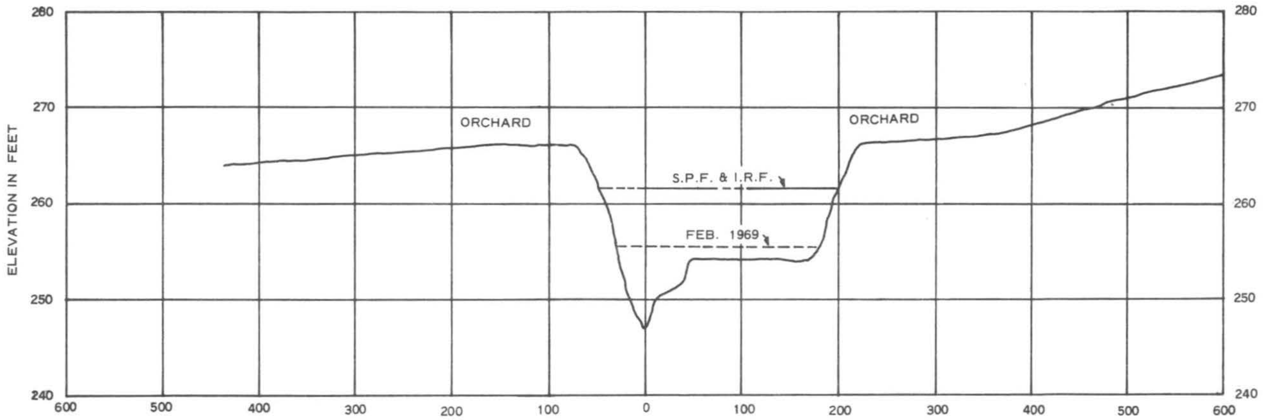
SECTION 37 @ STA. 1770+00

R.M. 33.5



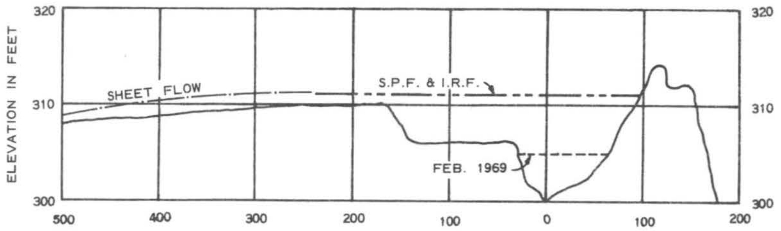
SECTION 41 @ STA. 1925+00

R.M. 36.4



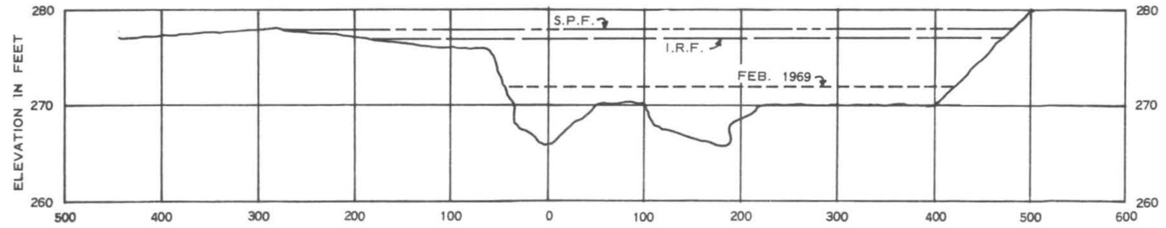
SECTION 38 @ STA. 1815+00

R.M. 34.4



SECTION 42 @ STA. 1970+00

R.M. 37.3



SECTION 39 @ STA. 1869+00

R.M. 35.4

NOTES:
ALL CROSS SECTIONS ARE SHOWN LOOKING DOWNSTREAM
ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL DATUM

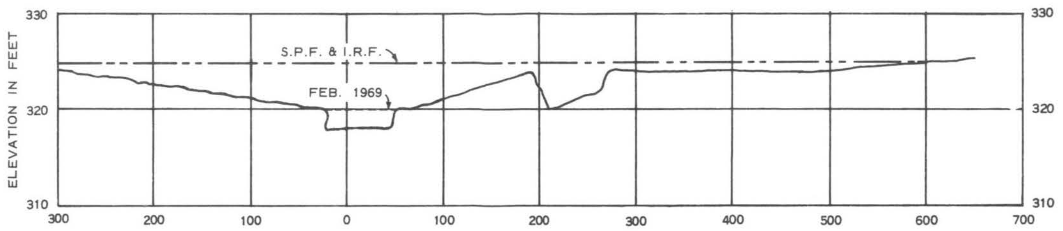
LEGEND

——— - ——— -	S.P.F.
—— —— ——	I.R.F.
- - - - - - - -	1969 FLOOD
—— · —— · ——	SHEET FLOW

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

COYOTE CREEK CROSS SECTIONS

U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO. 79-3-3
DATE FEB. 1970



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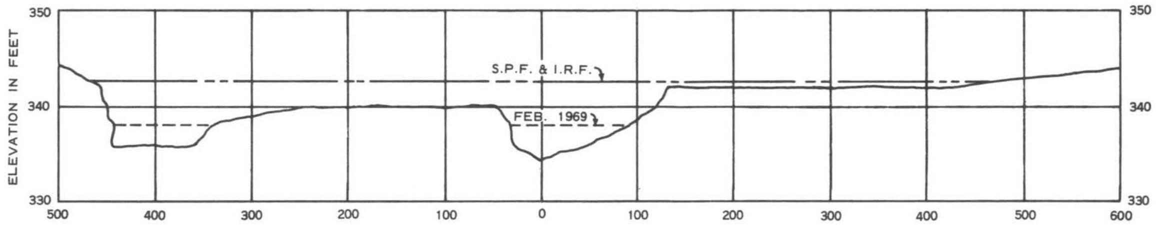
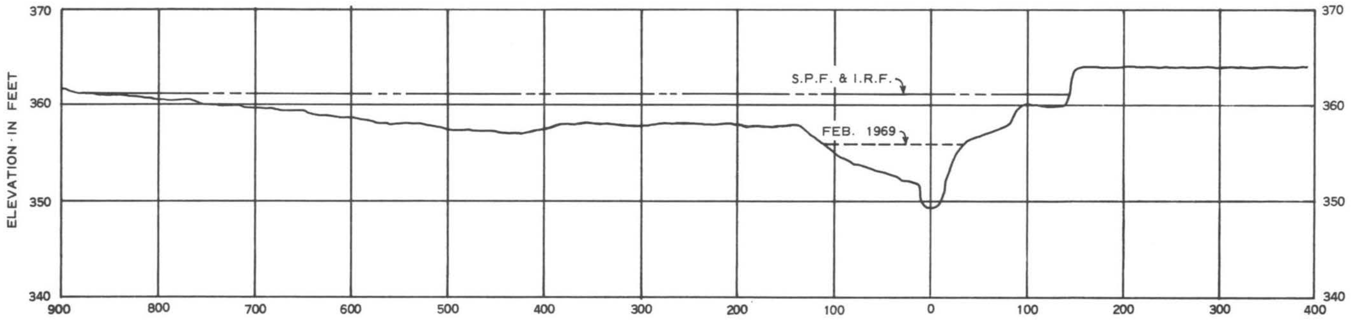
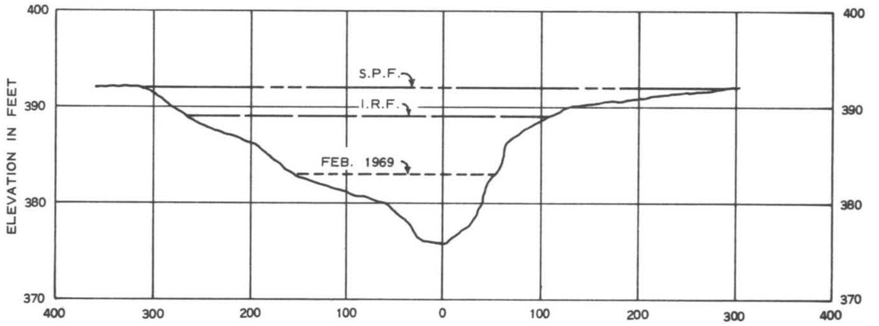


SECTION 44 @ STA. 2065+00
R.M. 39.1



SECTION 45 @ STA. 2115+00
R.M. 40.1



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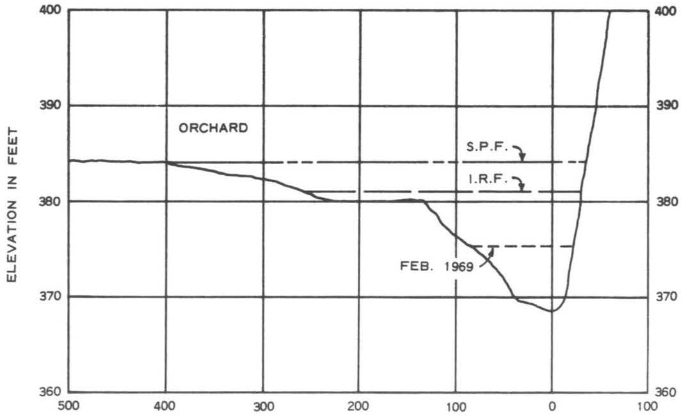

SECTION 46 @ STA. 2165+00
R.M. 41.0

NOTES:
ALL CROSS SECTIONS ARE SHOWN LOOKING DOWN STREAM
ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL DATUM

LEGEND
———·—·—— S.P.F.
——— ——— ——— I.R.F.
- - - - - - - - - 1969 FLOOD

FLOOD PLAIN INFORMATION STUDY
COYOTE CREEK
SANTA CLARA COUNTY, CALIFORNIA

COYOTE CREEK
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U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CORPS OF ENGINEERS
FILE NO.
DATE FEB. 1970
79-3-3